INDEX OF AUTHORS' NAMES.

TRANSACTIONS, PROCEEDINGS, AND ABSTRACTS 1911.

(Marked T., P., and A., i and A., ii respectively.)

Abbott, George Alonzo, rate of hydration of pyrophosphoric acid; a correction, A., ii, 108.

Abderhalden, Emil, cleavage products obtained by the partial hydrolysis of proteins, A., i, 589.

a-aminobutyric acid, A., i, 955.

composition of different kinds of silk. XIII., A., i, 1050.

cholesterol obtained from the skull contents of an Egyptian mummy, A., ii, 1006.

peptolytic enzymes in parasitic worms,

A., ii, 1009.

free amino-acids in the intestinal contents of certain mammals, A., ii,

Abderhalden, Emil, and Louis Baumann, derivatives of amino-acids. IV. Compounds with glycerol, A., i, 543.

Abderhalden, Emil, Hsing Lang Chang, and Erich Wurm, synthesis of polypeptides, derivatives of α-aminobutyric acid and their behaviour towards peptolytic ferments, A., i, 526.

Abderhalden, Emil, and Friedrich Friedel,

action of pepsin. IV., A., ii, 506. Abderhalden, Emil, Alberto Furno, Erich Goebel, and Paul Strübel, the value of different amino-acids in the organism of the dog under different circumstances, A , ii, 1002.

Abderhalden, Emil, and Heinrich Geddert, preparation of optically active polypeptides from racemic compounds, A., 1, 842.

Abderhalden, Emil, and Emil Gressel, the behaviour of iodo fat derivatives of cholesterol in the dog's body, A.,

ii, 1015. Abderhalden, Emil, and Paul Hirsch, [physiological action of iodo-fatty acid

derivatives], A., ii, 1119. C. 11.

Abderhalden, Emil, Paul Hirsch, and Markus Guggenheim, preparation of iodo-fatty acid compounds and their behaviour in the animal, A., i, 954.

Abderhalden, Emil, and Ernst Kämpf, serological studies by the help of the optical method. XVI., A., ii, 505.

Abderhalden, Emil, and Karl Kautzsch, methylated polypeptides, A., i, 528.

methylated polypeptides, betaine of

diglycylglycine, A., i, 954.

Abderhalden, Emil, and Karl Kiesewetter, the use of elastin for the detection of proteolytic enzymes, A., ii, 999.

Abderhalden, Emil, Wilhelm Klinge-mann, and Theodor Pappenhusen, the cleavage of proteins in the alimentary canal of different kinds of animals, A., ii, 508.

Abderhalden, Emil, and Bernhard Landau, the composition of the material spun by Oeceticus platensis, A., ii,

monoamino-acids of the whalebone of the north whale, A., ii, 509.

Abderhalden, Emil, and Joseph Markwalder, the value of individual aminoacids in the dog's organism under various conditions, A., ii, 634.

Abderhalden, Emil, and Otto Meyer, the detection of active pepsin in the intestinal contents by means of elastin, A.,

Abderhalden, Emil, and Franz Müller, the action of choline on blood-pressure, A., ii, 994.

Abderhalden, Emil, and Ludwig Pincussohn, serological studies by the help of the optical method. XIII., A., ii, 410.

Abderhalden, Emil, and E. Rathsmann, serological studies by the help of the optical method. XIV., A., ii, 505.

Abderhalden, Emil, and Peter Rona, the fat-splitting properties of the blood and serum of the dog under different conditions, A., ii, 1108.

Abderhalden, Emil, and Benomar Schilling, serological studies by the help of the optical method. XV., A., ii, 513.

Abderhalden, Emil, and Hubert Schmidt. the use of triketohydrindene hydrate for the detection of proteins and their cleavage products, A., ii, 674.

Abderhalden, Emil, and Friedrich Wil-

helm Strauch, action of the enzymes of gastric juice. II., A., i, 511.

Abderhalden, Emil, and Franz Wachsmuth, action of pepsin and hydro-chloric acid on elastin and other proteins. III., A., i, 511.

Abderhalden, Emil, and Arthur Weil, losses in the isolation of monoaminoacids [from proteins] by the ester I., A., i, 1049.

proteins and protein cleavage products in Egyptian mummies, A., ii, 630. Abderhalden, Emil, and Géza Zemplén,

partial hydrolysis of tunicate cellulose. Formation of cellobiose, A., i, 525.

Abe, Ryuji, acid sodium acetates, A., i, 599.

the hydrates of potassium acetate, their solubility and transition point, A., i, 946.

Abe, Ryuji. See also Yukichi Osaka. Abelin, J., a new method for the detection of salvarsan (diaminodihydroxyarsenobenzene), A., ii, 948.

Abelous, J. E., and E. Bardier, influence

of oxidation on the toxicity of urohy-

potensine, A., ii., 816. Aboulenc, J. See Jean Baptiste Senderens.

Abraham, Felix. See August Michaelis. Accame, L. See Guido Pellizzari.

Achalme, Pierre, viscosity and diastatic actions. Hypothesis on the nature of diastases, A., i, 592.

alme, Pierre, and M. Bresson, method for determining the individuality or plurality of diastases Achalme, in a liquid, A., i., 172.

influence of the viscosity of the medium on diastatic activity, A., i, 591.

rôle of viscosity in variations of the action of invertase according to the concentration of sucrose, A., i, 591.

Achenbach, Fritz. See Martin Freund. Ackermann, Dankwart, the splitting of the pyrrolidine ring by bacteria, A., i, 808.

B-alanine as a bacterial aporrhegma, A., ii, 757.

Ackermann, Dankwart, R. Engeland, and Friedrich Kutscher, synthesis of δ-guanidinovaleric acid, A., i, 956.

Ackermann, Dankwart, and H. Schütze, the formation of trimethylamine by Bacterium prodigiosum, A., ii, 61.

Ackroyd, Harold, the presence of allantoin in certain foods, A., ii, 308. uric acid metabolism in rabbits, A., ii,

747.

Acree, Solomon Farley. See Sylvester Kline Loy. Adamla, J. See Adolf Windaus.

Adams, Elliot Quincy, modification of the periodic table, A., ii, 593.

Adams, L. H. See John Johnston.

Adams, Roger. See Henry Augustus Torrev.

Addis, Thomas, pathogenesis of hereditary hæmophilia, A., ii, 632.

Adhicary, BirendraBhusan. See Pañchañan Neogi.

Adlam, George Henry Joseph. See Herbert Brereton Baker.

Adler, Oscar, lævulosuria, A., ii, 311. Administration der Minen von Buchsweiler Akt-Ges, preparation of esters of organic acids with the exception of those of formic acid, A., i, 601.

Afanaséeff, B. P. See Leo A. Tschugaeff. Ageno, Fernando, and N. Guicciardini, estimation of arsenic and of iron salts in mineral waters, A., ii, 769.

Ageno, Fernando. See also Raffaele Nasini. Agulhon, Henri, tolerance of maize to boron, A., ii, 142.

action of ultra-violet light on diastases, A., ii, 243.

colorimetric detection of alcohol in presence of acetone, colour reactions of certain groups of organic compounds in presence of mineral acids and potassium dichromate, A., ii, 1140.

Aiazzi-Mancini, M. See Angelo Angeli. Aktien-Gesellschaft für Anilin-Fabrikation, [preparation of methyl-2:4-diaminoanisole], A., i, 493.

preparation of arylsulphodiazoiminoderivatives, A., i, 509.

[preparation of a carbamide derivative], A., i, 584.

preparation of hydroxy-B-naphthylpyrazolonemonosulphonic acids A., i, 687.

preparation of 4-chloro-6-nitro-2aminophenol, A., i, 853.

preparation of ω-p-alkylhydroxyphenylethylamines and their N-alkyl derivatives, A., i, 857.

preparation of phenothioxin and its derivatives, A., i, 903.

Alabéeff, Pawel. See Iwan Ostromisslensky.

See E. Oliveri-Mandalà. Alagna, B.

Alberda van Ekenstein, William, and Jan Johannes Blanksma, Liebermann's protein reaction, A., ii, 554.

Albert, Bruno. See Conrad Willgerodt. Albertini, Alberto. See Herman Decker, and Adolf Kaufmann.

Albertoni, Pietro, and Felice Rossi, the action of animal proteins on vege-

tarians, A., ii, 411.

Alcock, Nathaniel Henry, and Jordan Roche Lynch, relation between the physical, chemical, and electrical properties of nerves. IV. Potassium, chlorine and potassium chloride, A., ii, 413.
Aldrich, Thomas Bailey, tribromotert.

butyl alcohol, C₄H₇OBr₃, A., i, 346. Aldridge, Montague.See Frederick

Daniel Chattaway.

Alessandri, Luigi. See Angelo Angeli. Alexander, Paul, caoutchouc nitrosites and their application in analysis, A., i, 389.

constituents of guayule, Parthenium argentatum, A., i, 897.

Allan, John. See Edmund Knecht.

Alleman, Gellert. See Percival Rudolph Roberts.

Allen, Eugene Thomas, ore deposition in relation to iron sulphides, A., ii, 1093.

Allmand, Arthur John, the element Cu | Cu₂O alkali | H₂ at 0°, T., 840; P., 69.

ArthurJohn.See also Allmand, Frederick George Donnan.

Aloy, Jules [François], and V. Brustier, the catalysis of borneol and the catalytic hydrogenation of camphor, A., i, 730.

Aloy, Jules, and Pierre Charles Rabaut, carbamides derived from a-aminop-hydroxyphenylacetic acid and its methyl ether, A., i, 371.

p-hydroxyphenylglyoxylic, p-hydroxyphenylacetic, and p-hydroxyphenylglycollic[p-hydroxymandelic] acids, A., i, 780.

Alpern, Roman, and Charles Weizmann, attempts to prepare glycerides of amino-acids, T., 84.

Alsberg, Carl Lucas, formation of d-

glutonic acid by Bacterium savastanoi, A., ii, 317.

Altenburg, Hans. See Hans Rupe. Amagat, Emile Hilaire, internal pressure of liquids and the determination of the absolute zero, A., ii, 1061.

Amann, J., ultra-microscopic observations, A., ii, 85, 388.

refractrometric estimation of phosphates in urine, A., ii, 536.

Amantea, Giuseppe, ereptase of the intestinal juice, A., ii, 1000.

Amar, Jules, putting into action of the

human machine, A., ii, 48.

Amberg, Samuel, and Walter Jones, the cleavage of nucleins in relation to enzymes, with special reference to the formation of hypoxanthine in the absence of adenase, A., i,

823.

the application of the optical method to a study of the enzymatic decomposition of nucleic acids, A., i, 824.

Amberg, Samuel, and M. C. Winternitz, the catalase of sea-urchin eggs before and after fertilisation, with especial reference to the relation of catalase to oxidation in general, A., ii, 1110.

Amberger, Conrad, colloidal mercury, A., ii, 205.

Ambler, Joseph Alfred. See Treat Baldwin Johnson.

Amend, Carl Gustave. See Marston Taylor Bogert.

Ameseder, M. Ph. F., composition of deposits in calcified aortæ, A., ii, 219.

Amosoff, W. See Nicolai M. Kijner. Amsler, N. K. See A. E. Porai-Koschitz.

Amstel, (Miss) J. van, and G. van Iterson, jun., the temperature optimum of physiological processes, A., ii, 319.

Anastachewitz, A. See Adolf Kaufmann.

Ancel, Paul. See Paul Bouin.
Andersen, A. C., nitrogen estimations by Kjeldahl's method, A., ii, 655.

Anderson, Benton R., fruit of Solanum dulcamara, A., ii, 762.
 Anderson, Ernest, empirical relation be-

tween the configuration and rotation of sugars, A., i, 770.

Anderson, John S. See Robert A. Houstoun.

Anderson, Rudolph. See Hermann Leuchs.

Andersonn, Erich. See Otto Diels.

Andesner, Hans, behaviour of gabbro magma in fusions, A., ii, 47.

Andò, Gerolamo. See Bernardo Oddo. André, Emile, combination of amines with acetylenic ketones. Preparaof ethylenic \(\beta\)-substituted amino-ketones, A., i, 268.

Phenylbutinene, cyclic acetylenes. A., i, 277.

new method for obtaining & diketones, A., i, 545.

André, Gustave, conservation of salts during the course of vegetation of an

annual plant, A., ii, 141.

conservation of saline materials by an annual plant; distribution of dry material, total ash, and nitrogen, A., ii, 423.

conservation of saline materials by an annual plant; distribution of fixed

elements, A., ii, 423.

diffusion of saline substances through certain vegetable organs, A., ii,

Andreae, J. L., the "floating" method of determining the density of homogeneous solid substances, 469.

Andrews, Albert Edward, the active constituents of the Indian solanaceous plants Datura stramonium, D. fastuosa, and D. metel, T., 1871; P., 248.

estimation of codeine in opium, A., ii, 1144.

Andrlik, Karl, guaninepentoside from molasses residues, A., i, 397.

Andrlik, Karl, and Josef Urban, influence of nutrition on the variability in the composition of sugar beet in the first year of growth, A., ii, 427.

Andstrom, V., the rusting of iron, A., ii, 43.

Anelli, Giovanni, estimation of sulphur by the Carius method, A., ii, 533.

Anelli, Giovanni. See also Giuseppe Oddo.

Angeli, Angelo, relations between certain derivatives of oxygen and of nitrogen, A., i, 620.

Angeli, Angelo, and Luigi Alessandri, nitropyrrole, A., i, 397. structure of the azoxy-compounds,

A., i, 817.

azoxy-compounds, A., i, 1045.

Angeli, Angelo, Luigi Alessandri, and M. Aiazzi-Mancini, N-phenyl ethers of the oximes, A., i, 544.

Angelico, Francesco, picrotoxin, A., i,

researches on azinetriphenylpyrrole, A., i, 1032.

Anger, Erwin. See Arthur Kötz.

Anilinfarben Extract - Fabriken vorm. Joh. Rud. Geigy, preparation of 6-chloro-1 hydroxynaphthacenequinone, and of 6-chloro-1-hydroxynaphthacenequinone-4-sulphonic acid, A., i, 136.

preparation of unsymmetrical substituted diphenylmethane derivatives,

A., i, 978.
Annenkoff, A. See Nicolai D. Zelinsky.

Anschütz, Richard, and Max Eugen Scholl, the benzotetronic acid group. II. Ketonic hydrolysis of benzotetronic acid [4-hydroxycoumarin] and its homologues, A., i, 315.

Antonoff, George Nicolaevich, the dis-

integration products of uranium, A.,

ii, 844.

Antropoff, Andreas von, dynamics of osmotic cells. I. Preliminary communication, A., ii, 472.

Aoki, Yoshihiko. See Rikō Majima.

Apitz, R. See Karl Auwers.

Apolloni, F. See Filippo Traetta-Mosca. Applebey, Malcolm Percival. See Earl of Berkeley.

Aps, Edmond J., a new apparatus for effecting slow and certain incineration, A., ii, 149.

Arbusoff, Alexander E., isomerisation of some phosphorus compounds. II., A., i, 100.

Archbutt, Sydney L. See Walter Rosenhain.

Archibald, Ebenezer Henry, and H. von Wartenberg, formation of ozone by electrolysis with alternating current, A., ii, 1083.

Ardern, Edward. See Gilbert John Fowler.

Arendt, Theodor. See Josef Houben. Aretz, Matthias, the long-waved portion of the spark and arc spectra of copper, A., ii, 351.

Ark, Harry. See Harry Medforth Dawson.

Armstrong, Edward Frankland. Henry Edward Armstrong.

Armstrong, Henry Edward, and Edward Frankland Armstrong, functions of hormones in regulating metabolism, A., ii, 642.

origin of osmotic effects. differential septa in plants with reference to the translocation of

nutritive materials, A., ii, 918.

Arnaud, Albert, and V. Hasenfratz, oxidation of higher acetylenic aliphatic acids, A., i, 515. Arndt, F. See Karl Auwers.

Arndt, Fritz, aromatic ψ-thiocarbamides and their conversion into anyl orthothiocarbonates, A., i, 918.

Arndt, Kurt, the influence of surface condition on the rusting of iron, A., ii, 896.

Arnold, John O., a fourth recalescence in steel, A., ii, 728.

Arnold, John O., and Arthur Avery Read, the chemical and mechanical relations of iron, carbon, A., ii, 1092. chromium and Arnold, Vincent, cysteine in animal organs, A., ii, 306. urorosein pigments of the urine, A., ii,

Aron, Hans, and Felix Hocson, rice as a foodstuff; the nitrogen and phosphoric acid metabolism with rice and other vegetable foodstuffs as the chief source of nutrition, A., ii, 625.

Aronssohn, Frédéric, mineral composition of the bee, A., ii, 509.

Arrivaut, G., manganese arsenides, A., ii, 399.

Artemeeff, D. N., growth of crystal spheres, A., ii, 24.

Artmann, Paul, the estimation of small quantities of ammonia, A., ii, 226.

Aschan, Ossian, constitution of camphene. II. Camphene hydrochloride and camphene hydrate, A., i, 794. constitution of camphene. III. Individuality of camphene from various sources, A., i, 796.

constitution of camphene. IV. Stereoisomeric camphene acids, A., i,

797.

Asher, Leon, and Martin Flack. Physiology of glands. XVI. The internal secretion of the thyroid and its formation under the influence of nerve-stimulation, A., ii, 55.

Assmann, Fritz, vegetable agglutinins,

A., ii, 126.

Astre, Charles, and J. Vidal, compounds of antipyrine with the chlorides of tin, A., i, 399. compound of antipyrine with ferric

chloride, obtained $_{
m with}$ ferrous

chloride, A., i, 814.

Astruc, A., loss of hydrocyanic acid from cherry-laurel water on keeping and on treatment with animal black, A., ii, 921.

Astruc, A., and L. Courtin, quinine and euquinine, A., i, 396.

Atack, FrederickWilliam. See Edmund Knecht.

Aten, A. H. W., specific conductivity of fused potassium nitrate, A., ii, 1051.

Atkin, E. E., relation of the reaction of the culture medium to the production of hæmolysin, A., ii, 997.

Atkins, William Ringrose Gelston, cryoscopic, ebullioscopic, and association constants of trimethylcarbinol, T.,

Atkinson, Harford M., a modified separating funnel and washer for heavy liquids, A., ii, 105.

Atterberg, Albert, barium sulphate a plastic substance, A., ii, 605.

Auerbach, Friedrich, and Hans Pick, the alkalinity of aqueous solutions of carbonates, A., ii, 1078.

Aufray, M., amounts of ammonia and nitric acid in rain-water in Tonquin, A., ii, 224.

Auger, Victor, oxidation of iodine by hydrogen peroxide, A., ii, 386.

Auger, Victor, and M. Gabillon, new method for estimating sulphuric acid and sulphates, A., ii, 330.

Augustin, Hans, estimation of carbons in irons and steels in the electric furnace, A., ii, 1029.

Aureli, S. See Guido Bargellini.

Auschkap, Y. I. See A. E. Porai-Koschitz.

Otto. See Rudolf Weg-Auspitzer, scheider.

Austin, Percy Corlett, the interaction of silver nitrate and potassium persulphate and its catalytic effect in the oxidation of organic substances, T., 262; P., 24.

Autenrieth, Wilhelm [Ludwig], detection of hydrocyanic acid in an exhumed corpse and the stability of hydrocyanic acid in presence of putrefying matter, A., ii, 78.

Autenrieth, Wilhelm, and Theodor Tesdorpf, colorimetric estimation of dextrose in urine, A., ii, 159.

Auwers, Karl [Friedrich], hydroaromatic compounds. Carboxylic acid of the "semibenzene" group, A., i, 298.

hydroaromatic compounds. derivatives of hydroaromatic ketones

and semibenzenes, A., i, 383.

Auwers, Karl, R. Apitz, F. Arndt, A. Boennecke, and Karl Müller, hydroxyazo-compounds and ketohydrazones, IV.-VI., A., i, 585.

Auwers, Karl, Hugo Dannehl, and A. Boennecke, hydroxyazo-compounds and ketohydrazones, I.-III., A., i,

Auwers, Karl, and Fritz Eisenlohr, spectro-chemical investigations. II. The refraction and dispersion of substances containing one pair of conjugate double linkings, A., ii,

spectro-chemical investigations. III. The refraction and dispersion of hydrocarbons, aldehydes, ketones, acids, and esters containing several related conjugations, A., ii, 782.

Auwers, Karl, and Karl Müller, hydroaromatic compounds. Hydrocarbon, C_9H_{12} , of the semibenzene series, A., i,

Auwers, Karl, Walter A. Roth, and Fritz Eisenlohr. Thermochemical investigations. IV. Heats of combustion of terpenes and styrenes and prediction of heats of combustion, A., ii, 1065.

Auzies, J. A. A., new method of estimating the various elements of an organic substance. (1) Substance containing C, H, O, N. (2) Substance containing C, H, O, N, S. (3) Substance (3) Substance containing C, H, O, N, S, Cl, Br, I, A., ii,

Averbeck, H, See Ludwig Knorr.

Avrutin, Ghersch. See Guido Bargellini. Awerkieff, N. D., an animal alkaloid from sterilised milk kept under specific conditions, A., ii, 751.

Aynaud, M., the platelets of human blood, A., ii, 213.

Azema, L., ilmenite from Brazil, A., ii, 407.

Baar, N., alloys of molybdenum with nickel, of manganese with thallium, and of calcium with magnesium, thallium, lead, copper, and silver, A., ii,

Baat, (Miss) Woutrine Constance de. See Frans Antoen Hubert Schreinemakers.

Bach, Alexis, the reducing ferments.

I. The Schardinger enzyme (perhydrindase), A., i, 412.

the reducing ferments. II. Reduction of nitrates by the system perhydrase,

aldehyde, water, A., i, 759.

Bach, Alexis, and B Sbarsky, the behaviour of phenolase towards acids, A., i, 824.

Backlund, Helge, the olivine group, A., ii, 616.

Bachrun, Fritz. See Arthur Stähler.

Bacon, Raymond Foss, Philippine terpenes and essential oils. IV., A., i, 73.

solution of oxalic acid and uranium salts as a chemical photometer, A., ii, 5.

Badenhausen, Theodor. See HansStobbe.

Badische Anilin- & Soda-Fabrik, preparation of halogenindoxylic acids and

their esters, A., i, 156. preparation of 1:5-dichloronaphthalene-3-sulphonic acid and of 1:4-dichloronaphthalene-6-sulphonic acid, A., i, 434.

preparation of o-nitroanthraquinonecarboxylic acids, A., i, 455.

preparation of acenaphthenone, A., i, 464.

Badische Anilin- & Soda Fabrik, preparation of halogenated arylanthraquinones, A., i, 466.

preparation of anthranilie acid esters containing a substituted group in the para-position to the aminogroup, A., i, 539. preparation of substituted anthraniFc

acid esters, A., i, 539.

preparation of sulphonated aromatic ammonium compounds, A., i, 627. preparation of βγ-dimethyl-Δαγ-buta-

diene, A., i, 829. preparation of chloroalkylarylsulph-

onyl chlorides, A., i, 850.

preparation of a mixture of 1:4- and 1:5-dichloronaphthalenes, A., i, 850. preparation of aminoanthraquinones and of aminonaphthanthraquinones or their derivatives, A., i, 884.

preparation of condensation products in the anthracene series, A., i, 885.

preparation of anthraquinone condensation products, A., i, 885.

preparation of halogenated derivatives of indigotin, A., i, 925, 1030.

preparation of sulphurous acid derivatives of unsaturated hydrocarbons, A., i, 938.

[preparation of derivatives of anthraquinonecarboxylic acids and of anthraquinoneacridones], A., i, 980. preparation of phenanthridone derivatives, A., i, 1026.

preparation of ammonium salts from nitrogen compounds of aluminium,

A., ii, 1088.

Baer, Julius, and Léon Blum, the breakdown of fatty acids in diabetes mellitus, A., ii, 512.

the action of chemical substances on sugar excretion and on acidosis. III., A., ii, 512.

Baessler, Paul, manurial value of calcium nitrate and calcium cyanamide as compared with sodium nitrate and ammonium sulphate, A., ii, 650.

Baeyer, Adolf von, and Jean Piccard,

dimethylpyrone, A., i, 901.
Baeyer, Otto von, Otto Hahn, and Lise Meitner, observation of β -rays from radium-D, A., ii, 567.

the β -rays of the active deposit of thorium, A., ii, 567.

Baeyer, Otto von. See also Heinrich Rubens.

Bagard, P. See André Wahl.

Bagh, Alexander von. See Alfred Einhorn. Baglioni, Silvestro, effects of nutrition with maize. III. Action of the pancreatic juice of the dog on zein and gliadin, A., ii, 999.

Bagster, Lancelot Salisbury, properties of binary mixtures of some liquefied gases, T., 1218; P., 141.

Bahr, Fritz, thallous hydroxide, A., ii, 803. Bahr, Fritz, and Otto Sackur, the thermal

formation of potassium manganate from manganese dioxide and potassium hydroxide, A., ii, 1091.

Bailey, Herbert S., an electrically heated vacuum fractionation apparatus, A.,

ii, 256.

Bain, William, the pressor bases of the urine. III., A., ii, 631.

Bainbridge, Francis A., the action of certain bacteria on proteins, A., ii, 1121.

Baker, Herbert Brereton, ionisation of gases by chemical change, A., ii, 244.

Baker, Herbert Brereton, and George Henry Joseph Adlam, the constancy of water of crystallisation in hydrated salts. Part I., T, 507; P., 17. Baker, Herbert Brereton. See also

Baker, Herbert Brereton. See also Augustus George Vernon Harcourt.

Baker, Julian Levett, and Henry Francis Everard Hulton, estimation of lactose in the presence of the commonly occurring sugars, A., ii, 74.

Baker, Richard Thomas, and Henry George Smith, the pines of Australia,

A., i, 477.

Bakunin, Marussia, and E. Lanis, photochemical reactions of the nitrophenylindones. I., A., i, 992.

indones. I., A., i, 992.

Balareff, D., products formed when phosphoric oxide dissolves in water, A., ii, 107.

can Thomson's thermochemical method be employed to investigate the hydration of metaphosphoric acid? A., ii, 798.

the hydrates of arsenic pentoxide, A., ii, 798.

the velocity of hydration of metaphosphoric acid. I., A., ii, 974.

Balbiano, Luigi, Angeli-Rimini reaction of the aldehydes, A., i, 987.

of the aldehydes, A., i, 987.

Bally, Oscar, Roland Scholl, and G.

Lentz, action of glycerol and sulphuricacid on amino-compounds and on compounds free from nitrogen belonging to the anthracene group: benzanthrone and its reduction products. Observations on the nomenclature of complex ring-systems of the anthracene group, A., i, 677.

Baly, Edward Charles Cyril, the absorption spectra of chlorobenzene, the dichlorobenzenes and the chlorotoluenes, T., 856; P., 72.

toluenes, T., 856; P., 72. theory of geometrical and stereoisomerism, A., ii, 451. Bamberger, Eugen, behaviour of acetic anhydride at a high temperature, A., i, 103.

oo'-azoxybenzaldehyde, A., i, 694.

relation between bisnitroso-compounds and arylnitrosohydroxylamines, A., i, 996.

Bamberger, Eugen, and Louis Blangey, action of magnesium methyl iodide on p-xyloquinone and toluquinone, A., i, 883.

Bamberger, Eugen, and Andor Fodor, anthrauil. XVIII. Methods of preparation of o-nitrosobenzaldehyde, A., i, 60.

Bamberger, Euqen, and W. Ham, behaviour of certain para-substituted nitrosobenzenes towards sulphuric acid. A., i, 684.

Bamberger, Max, a new apparatus for the preparation of liquid and solid air for demonstrations, A., ii, 106.

Bamberger, Max, and Karl Krüse, the radioactivity of the mineral springs of Tyrol. III., A., ii, 1049.
Bamberger, Max, and A. Landsiedl,

Bamberger, Max, and A. Landsiedl, chemistry of Polyporus frondosus, A., ii, 920.

Bancelin, M., viscosity of emulsions, A., ii, 586.

the viscosity of suspensions and the determination of Avogadro's number, A., ii, 1067.

Banerjee, Manindra Nath, the action of Allium sativum (garlic) juice on lead and mercury, P., 234.

the causes of the differences in the action of sodium and potassium on water, A., ii, 109.

Banerjee, Manindra Nath, and Satish Chandra Banerjee, the action of nascent hydrogen on nitric acid, P., 326.

Banerjee, Satish Chandra. See Manindra Nath Banerjee.

Bang, Ivar, diastases. I., A., i, 591. the chemical occurrences in milk curdling by rennet, A., i, 826.

curdling by rennet, A., i, 826. estimation of sugar and of phosphoric acid. Preparation of menthylglycuronic acid, A., ii, 664.

titration of diabetic sugar, A., ii,

Bang, Ivar, and Ernst Overton, the action of cobra poison, A., ii, 316.
 the action of crotalus poison, A., ii, 913

Baragiola, W. I., and P. Huber, judging wines by the low alkalinity of the ash, A., ii, 662.

Baragiola, W. I. See also Karl von der Heide. Barbier, [François Antoine] Philippe, separation of alumina and ferric oxide, A., ii, 70.

composition of potash felspars, A., ii,

735.

Barbier, Philippe, and Réné Locquin, action of organo-magnesium compounds on methyl acetylpyrotartrate, A., i, 708.

conversion of substituted paraconic acids into the isomeric cyclopropanedicarboxylic acids, A., i, 722.

new method of synthesis of methyl ketones, A., i, 725.

Barbieri, Giuseppe A., thorium arsenates, A., ii, 207.

complex molybdates of the rare earths, A., ii, 291

Barbieri, Giuseppe A., and Filippo Calzolari, labile hydrated forms fixed by means of an organic base, A., i, 184.

the compounds of hydrated metallic salts with hexamethylenetetramine. (Labile hydrated forms fixed by means of an organic base.) II., A., i, 266.

compounds of salts of [metals of] the rare earths with hexamethylenetetr-

amine, A., i, 268.

persulphates of bivalent metals, A., ii, 889.

Barbieri, Giuseppe A., and F. Lanzoni, hydrated additive products of metallic dichromates. (Labile hydrated forms fixed by means of an organic base.) III., A., i, 268.

Barbieri, Giuseppe A., and G. Pampanini,

the ferriammines, A., i, 225.

Barbieri, N. Alberto, chemical composition of the nervous system, A., ii, 413. Barcroft, Joseph, the effect of altitude

on the dissociation curve of blood, A., ii, 211.

Barcroft, Joseph, and Harold L. Higgins, determination of the constants of the differential blood-gas apparatus, A.,

Barcroft, Joseph, and L. Orbeli, influence of lactic acid on the dissociation curve of blood, A., ii, 124.

Bardach, Bruno, dimorphism of iodoform, A., i, 101.

a reaction for aromatic inner anhydrides based on the modification of the crystalline form of iodoform, A., ii, 826.

an inner anhydride reaction of albu-

min, A., ii, 945.

Bardach, Bruno, and Siegmund Silberstein, Jolles's polarimetic estimation of sugars based on the use of alkali, A., ii, 663.

Bardach, Friedrich, globular appearance of certain precipitates, A., ii, 98.

Bardachi, F., the decomposition of blood-pigment, A., i, 95.
Bardier, E. See J. E. Abelous.
Bardt, H., analysis of cuprous iodide,

A., ii, 1033.

Bargellini, Guido, some derivatives of hydroxyquinol, A., i, 305.

Bargellini, Guido, and S. Aureli, some derivatives of hydroxyquinol, A., i, 855.

Bargellini, Guido, and Ghersch Avrutin, some derivatives of hydroxyquinol. I. and II., A., i, 68.

Bargellini, Guido, and Leda Bini, tetrahydroxybenzenes, A., i, 211.

Bargellini, Guido, and Gino Forli-Forti, B-phenylcoumarins. II., A., i, 902.

Bargellini, Guido, and G. Leonardi, B-phenylcoumarins. I., A., i, 901.

Bargellini, Guido, and Ermanno some derivatives of Martegiani, hydroxyquinol. IV. and VI., A., i, 854, 965.

Barger, George, and Henry Hallett Dale, 4-B-aminoethylglyoxaline, a depressor constituent of intestinal mucose, A., ii, 217.

Barger, George, and Arthur James Ewins, the constitution of ergothioneine; a betaine related to histidine, T., 2336; P., 305.

Barger, George, and Walter William Starling, \$\beta\$-2-methoxynaphthylpropionic acid and methoxy-perinaphthhydrindone, T., 2030; P., 258.
Barger, George. See also Pieter van

Romburgh.

Barillé, A., formation of dental "tartar" by dissociation of the carbophosphates of saliva, A., ii, 741.

action of seltzer water on lead, tin, and antimony; causes of poisoning by chemical alteration, A., ii, 889.

Barker, Thomas Vipond, some new inorganic salts, T., 1326; P., 198. note on a colour change in \$-p-nitrophenol brought about by sunlight,

P., 158. Barkla, Charles Glover, the spectra of the fluorescent Röntgen radiations,

A., ii, 839.

Barnes, Ernest J. See Andrew Mc-William.

Barnett, Edward de Barry, note on the preparation of thiobenzanilide, P., 8. See also

Barnett, Edward de Barry. Harold Leete.

Barnett, George de Forest, and Walter Jones, recovery of adenine, A., i, 403.

Baroni, E., and O. Borlinetto, solubility of alkaloids in an aqueous boric acidglycerol solution, A., i, 903.

Barre, Maurice, double sulphates formed by lanthanum and cerium sulphates with the alkali sulphates, A., ii, 42. double salts formed between sparingly

and soluble sulphates alkali

sulphates, A., ii, 979.

Barrett, William Henry. See Harold Brewer Hartley.

Barrow, Fred. See Alexander Mc-Kenzie.

Barschall, Hermann, specific heats of solids at low temperatures, A., ii,

heat of evaporation of oxygen, A., ii,

Bartell, F. E., permeability of porcelain and copper ferrocyanide membranes, A., ii, 1072.

Barthe, [Joseph Paul] Léonce, phosphates of uranyl and of amines, A., i, 526.

Bary, Paul, mode of dissolution of colloidal substances, A., ii, 590. osmotic phenomena in non-conducting media, A., ii, 702.

Bary, Paul, and L. Weydert, apparently reversible character of the vulcanisation reaction of caoutchouc by sulphur, A., i, 1003.

Baschieri, Ennio, constitution of ilvaite, A., ii, 300.

constitution of zeolites, A., ii, 502.

Baskerville, Charles, and Stevenson, the oxidation of ferrous

salts, A., ii, 729.

Bassett, Henry, jun., and Hugh Stott
Taylor, the interaction of metallic oxides and phosphoryl chloride, alone and in the presence of certain organic compounds, T., 1402; P., 155.

Bassett, H. P., and Firman Thompson,

preparation and properties of an oxydase occurring in fruits, A., ii, 425.

Bates, F. W., effect of light on insulation by sulphur, A., ii, 836.

Bates, Sam J. See John Bishop Tingle. Batey, John Percy, formation of hypoiodites and their action on sodium thiosulphate; a source of error in certain iodine titrations, A., ii, 436.

Batschinski, Alexius, determination of degree of molecular association in liquids, A., ii, 189.

Battelli, Fr., and (Mlle.) Lina Stern, the oxidation of succinic acid by animal tissues, A., ii, 132.

the oxidation of citric, malic, and fumaric acids by animal tissues, A., ii, 412.

Battelli, Fr., and (Mlle.) Lina Stern, pnein, A., ii, 748.

the action of trypsin on the different oxidative processes in animal tissues, A., ii, 808.

antipneumin, A., ii, 1008.

Baubigny, Henri, estimation of very small amounts of bromine in presence of chlorides and iodides, A., ii, 532.

Baud, Émile, molecular heat of fusion, A., ii, 581.

Baudisch, Oskar, preparation of alkali and ammonium salts of nitrosoarylhydroxylamines, A., i, 125.

nitrate and nitrite assimilation, A., ii,

quantitative separation with "cupferron," A., ii, 939.

development of colours on fibres by light energy, A., ii, 952.

Baudrexel, August, a new method of estimating alcohol vapour, A., ii, 1036.

Baudrexel, August. See also Wilhelm Völtz.

Bauer, Edouard. See Albin Haller.

Bauer, Hugo, action of organo-magnesium compounds on 4-methoxyphthalic anhydride, A., i, 871.

Bauer, Hugo, and Hedwig Dieterle, the nature of the carbon double linking. III. The bromides of anisylidenecinnamylideneacetone,

the pyrazoline transformation of unsaturated hydrazones, A., i, 921.

Bauer, Hugo, and Ewald Wölz, action

of organo-magnesium compounds on homophthalic anhydride,

Bauer, Julius, swelling capacity of nerve tissue, A., ii, 1006.

Bauer, Julius, and St. Engel, the chemical and biological differentiation of the three proteins of cow's and human milk, A., ii, 307.

Baum, E., a fractionating column, A., ii, 467.

See Emil Baumann, Louis. Abderhalden.

Baumann, Paul, apparatus for electroanalytical determinations with a mercury cathode, A., ii, 925.

mixtures. Baume, Georges,gaseous Freezing-point curves of gaseous systems, A., ii, 581.

Baume, Georges, and Albert F. O. Germann, fusibility curves of gaseous mixtures: oxonium systems formed by acetylene, ethylene, nitric oxide, and methyl ether, A., i, 830.

Baume, Georges, and Georges Pamfil, fusibility curves of gaseous mixtures; compounds of hydrogen chloride and of sulphur dioxide with methyl alcohol, A., i, 414.

Baume, Georges, and F. Louis Perrot, fusibility curves of gaseous mixtures; systems formed by carbon dioxide and hydrogen sulphide with methyl alcohol

and methyl ether, A., ii, 696. Baumhauer, Heinrich, crystallographicoptical investigations [double platino-

cyanides and picrates, A., i, 431. Baur, Emil, periodic system of the elements, A., ii, 480.

[nature of the photochlorides of silver and their potential in light], A., ii, 681.

Baur, Emil, and F Becke, hydrothermal silicates, A., ii, 991.

Bauriedel, Friedrich. See Alexander Gutbier.

Baxter, Gregory Paul, revision of the atomic weights of silver and iodine. II. Ratio of silver to iodine, A., ii, 112.

changes in volume on solution in water of the halogen salts of the alkalis, A., ii, 589.

Baxter, Gregory Paul, Arthur Clarence Boylston, Edward Mueller, Newton Henry Black, and Philip Burwell Goode, refractive power of the halogen salts of lithium, sodium, and potassium in aqueous solution, A., ii, 557.

Baxter, Gregory Paul, Laurie Lorne Burgess, and Herbert Wilkens Daudt, refractive index of water, A., ii, 557.

Baxter, Gregory Paul, and Harold Canning Chapin, the atomic weight of neodymium. I. Analysis of neodymium chloride, A., ii, 285.

Baxter, Gregory Paul, and Thorbergur Thorvaldson, a revision of the atomic weight of iron. IV. The atomic weight of meteoric iron, A., ii,

Baxter, Gregory Paul, Thorbergur Thorvaldson, and Victor Cobb, a revision of the atomic weight of iron. III., A., ii, 287.

Baxter, Gregory Paul, and R. D. Warren, the efficiency of calcium bromide, zinc bromide, and zinc chloride as drying agents, A., ii, 268.

Baxter, Gregory Paul, and Truman S. Woodward, the ultra-violet absorption spectrum of aqueous solutions of neodymium chloride, A., ii, 351.

Bayer, R. See Walter König.

Bayliss, William Maddock, "anomalous" adsorption, A., ii, 99.

Bayliss, William Maddock, properties of colloidal systems. II. adsorption as preliminary to chemical reaction, A., ii, 866.

properties of colloidal systems. Osmotic pressure of electrolyticallydissociated colloids, A., ii, 867.

Bayo, Enrique. See Rafael Cerero. Beard, Stanley Hoskings. See John

Joseph Sudborough. Bearder, Ernest Arthur. See Arthur

George Green.

Beattie, J. M., and A. G. Yates, sugar tests and pathogenicity $_{
m in}$ differentiation of streptococci, A., ii, 1019, 1122.

Beatty, R. T., the ionisation of heavy gases by X-rays, A., ii, 245.

Bebeschin, K., extractive material of ox kidneys, A., ii, 748.

Bechhold, [Jacob] Heinrich, pulsating uitiafiltration, A., ii, 385.

Becht, Frank C. See Arno B. Luckhardt.

Bechtereff, P., galvanic elements with carbon anodes, A., ii, 1054.

Beck, Richard, gases enclosed in tektites, A., ii, 292.

Becke, F. See Emil Baur.

Beckel, August, d-lupanine, A., i, 743. Becker, Arno, the carriers of electricity

in gases, A., ii, 957.

Becker, Arno. See also Berthold Rassow. Becker, Felix, condensation of vapours, A., ii, 1063.

Becker, Paul. See Hermann Decker.

Becker, R., Hubener's caoutchouc tetra-The estimation of mineral bromide. rubber and similar products in rubber, A., ii, 545, 1036. Becker, Walther. See Lothar Wöhler.

Becquerel, Jean, duration of phosphorescence of uranyl salts, A., ii, 238.

Beebe, Silas Palmer. See Elizabeth Cooke.

Béhal, Auguste, and A. Detœuf, a new derivative of carbamide, chlorocarbamide, A., i, 957.

Behr, Val. See Karl Bernhard Lehmann.

Behrend, Robert, β -dextrose, A., i, 14. a simple valve for water pumps, A., ii, 796.

Behrend, Robert, and Theodor Klinckhard, condensation of B-naphthaldehyde with methylsuccinic acid,

Behrend, Robert, Wilhelm Ludewig, and Theodor Klinckhard, synthesis 4-hydroxyphenanthrene, A., i., 288.

Behrend, Robert, and Martin Mertelsmann, sulphonation of benzene, A., i, 189.

Behrend, Robert, and Willy Reinsberg, phenylhydrazones of dextrose, A., i,

Behrend, Robert, and Karl Struve, oxidation of methyluracil, A., i, 158.

Bell, George Denton. See Marston Taylor Bogert.

Bell, James Munsie, the composition of solid phases in four component systems, A., ii, 973.

Bell, James Munsie, and Alexander L. Feild, distribution of ammonia between water and chloroform, A., ii,

Bell, James Munsie. See also Robert A. Hall.

Bellaire-Wörschweiler, Fr. C., automatic filtering of solutions by maintaining a constant level, A., ii, 876.

Bellucci, Italo, direct synthesis of the glycerides. II., A., i, 416.

Bellucci, Italo, and Riccardo Manzetti, direct synthesis of the glycerides, A., i, 259, 515.

Bellucci, Italo, and G. Sabatini, an isomeride of potassium ferricyanide, A., i, 430.

case of structural isomerism in the metallic cyanides, A., i, 430.

Beloff, S. See Nicolai M. Kijner.

Benary, Erich, synthesis of pyrrole and furan derivatives from dichloroethyl ether, ethyl acetoacetate, and ammonia, A., i, 319.

synthesis of pyridine derivatives from dichloroethyl ether and ethyl-\$aminocrotonate, A, i, 320.

action of halogeno-fatty acid halides on esters of malonic acid. II., synthesis of tetramic acid, A., i, 672.

Benary, Erich. See also Hans Stobbe. Benedek, L., chemical constitution of iron-pyrites and pyrolusite, A., ii,

Benedicks, Carl [Axel Fredrik], solid colloidal systems in metallography, A., ii, 25.

the Ovifak iron, a natural carbon steel, A., ii, 287.

the synthesis of meteoric iron, A., ii, 495.

the crystallisation of white cast iron, A., ii, 728.

Benedict, Francis Gano, L. E. Emmes, and J. A. Riche, influence of preceding diet on the respiratory quotient after active digestion has ceased, A., ii, 211.

Benedict, Francis Gano, and Harold L. Higgins, effects on men at rest of breathing gas mixtures rich in oxygen, A., ii, 408.

Benedict, Francis Gano, and John Homans, a respiration apparatus for the estimation of carbon dioxide produced small animals, A., ii, 408.

Benedict, Francis Gano. See also Albert G. Emery and Harold L. Higgins.

Benedict, Stanley Rossiter, estimation of urea, A., ii, 79. estimation of total sulphur in urine,

A., ii, 330.

estimation of reducing sugars, A., ii, 340.

Benesch, Erwin, new method of formation of flavanthren, A., i, 794.

Bengis, Robert. See Treat Baldwin Johnson.

Benner, Raymond Calvier, rapid estimation of lead in ores by electrolysis with stationary electrodes, A., ii, 155.

good substitute for the platinum triangle, A., ii, 269.

fractionation of the yttrium earths by means of the succinates, A., ii, 285. electrically-heated sealed tube furnace, A., ii, 875.

Benner, Raymond Calvier, and M. L. Hartmann, rapid estimations and separations by means of a mercury cathode and stationary anode, A., ii,

Benner, Raymond Calvier, and William H. Ross, rapid estimation of nickel and cobalt by means of the gauze cathode and stationary anode, A., ii, 443.

rapid estimation of silver and cadmium by means of the gauze cathode and stationary anode, A., ii, 770.

Bennesch, E. See Robert Kremann.

Alfred, photochemical re-Benrath, actions in aqueous solution, A., ii,

oxidising action of dilute nitric acid

in sunlight, A., ii, 835.

Benrath, Alfred, and J. Wainoff, electrical conductivity of salts and mixtures of salts, A., ii, 847.

Berczeller, L., the solubility of the pancreas lipase, A., i, 758.

Beresteyn, H. van, new catalytic reaction with finely divided nickel, A., i, 761. Hermann

Bereza, Stanislaw. See Staudinger.

Berg, Armand, chromotellurates, A., ii, 611.

safety-valve for water pumps, A., ii, 714.

Berg, Ragnar, the excretion of phosphates ingested per os, especially of calcium phosphate, A., ii, 134.

Berger, Kurt. See Berthold Rassow. Bergner, E. See Adolf Sieverts.

Berkeley, Earl of, and Malcolm Percival Applebey, boiling point of water, A., ii, 1061.

boiling points of some saturated aqueous solutions, A., ii, 1062.

Berl, Ernst, and Andor Fodor, the nitrogenous products of alkaline hydrolysis of cellulose nitrate, A., i, 264.

the nitrogen-free products from the alkaline hydrolysis of cellulose

nitrate, A., i, 265.

Berlin, *Ernst*, new synthesis of γ -homocholine, A., i, 426.

homocholine ether, A., i, 426.

homocholine and neosine, A., i, 771.

I. The [physiological] action of homocholine. II. The glycine in crab extract, A., ii, 516.

Bernardini, Luigi, function of mangan-

ese in manuring, A., ii, 327. Bernardini, Luigi. See also G. Calcagni. Bernhardi-Grisson, R. See Arthur Rosenheim.

Bernhardt, Paul, new indicator for the estimation of alkalis in blood, A., ii,

Bernier, R., and G. Péron, estimation of small quantities of iodides alone or in presence of other substances, A., ii, 435.

estimation of small quantities of iodine in animal fluids, A., ii, 926.

Bernini, Arciero, radioactivity of the gas obtained from the thermal springs of St. Saturnino (Benetutti-Sardegna), A., ii, 846.

Bernoulli, August L., the law of Babo and the electron theory of metallic mixed crystals, A., ii, 368.

Bernus, Simon, coal tar pitch, A., i, 271.

Berry, Arthur John, the occlusion of hydrogen by the palladium-gold alloys, T., 463; P., 56.

Berry, Arthur John. See also Frederick Soddy.

Bertheim, Alfred, derivatives of p-aminophenylarsine oxide, A., i, 593. nitro- and amino-arsanilic acids, A., i,

1055. Bertheim, Alfred. See also PaulEhrlich.

Berthelot, Albert, di-iodotyrosine and its possible application in therapeutics, A., ii, 636.

Berthelot, Daniel, and Henri Gaudechon, principal types of photolysis of organic compounds by ultra-violet light, A., ii, 86.

photolysis of acids with a complex grouping by ultra-violet light. Action of uranium salts as luminous catalysts, A., ii, 170.

nitrification by ultra-violet light, A.,

ii, 240.

comparative action of ultra-violet light on straight chain and cyclic organic compounds. Mineral salts in aqueous solution, A., ii, 242.

photolysis of alcohols, acid anhydrides, ethers and esters by ultra-violet light, A., ii, 835.

Berthoud, A., kinetic theory of gases and thermodynamics, A., ii, 578.

Bertolo, Pasquale, action of chlorine on "saccharin," A., i, 858.

artemisinphenylhydrazone, A., i, 898. Bertrand, Gabriel, action of the Bulgarian ferment on proteins, A., ii, 140.

detection and estimation of small quantities of manganese, particularly in organic substances, 542.

Bertrand, Gabriel, and Arthur Compton, influence of temperature on the activity of cellase, A., i, 99. action of heat on emulsin, A., i,

influence of the reaction of the medium on the activity of cellase, new character distinguishing it from emulsin, A., i, 825.
Bertrand, Gabriel, and Maurice Javillier,

influence of manganese on the development of Aspergillus niger, A., ii, 222.

joint influence of zinc and manganese on the development of Aspergillus

niger, A., ii, 421. influence of zinc and manganese on the mineral composition of Aspergillus niger, A., ii, 644.

estimation of nicotine, A., ii, 827.

Bertrand, Gabriel, and Felix Rogoziński, hæmoglobin as a peroxydase, A., i, 248.

Bertrand, Gabriel, and R. Veillon, action of the Bulgarian ferment on monobasic acids derived from reducing sugars, A., ii, 221.

Bertrand, Gabriel, and Gustave Weisweiller, constitution of vicianose and of vicianin, A., i, 15.

Beschke, Erich, Franz Diehm, and2:8-or amphi-chrysoquinone, A., i, 889.

Beschke, Erich, Mariam Winograd-Finkel, and Georg Köhres, synthesis of chrysene, A., i, 873.

Besson, A. A., the anhydride of lactic acid, A., ii, 160.

analysis of lactic acid, A., ii, 1140.

Besson, Adolphe, action of the silent electrical discharge on dry and moist ammonia, A., ii, 718.

formation of hydrogen peroxide in the electrical discharge, A., ii, 1082.

Besson, Adolphe, and L. Fournier, reduction of phosphoryl chloride by hydrogen under the influence of the electrical discharge, A., ii, 37.

bromo- and hydrobromo-derivatives of silicon, A., ii, 38. chlorobromides and chloroiodides of

silicon, A., ii, 280.

Besson, E., dissymmetry of positive and negative ions relatively to the condensation of water vapour, A., ii, 839.

Betzel, R. See Reginald Oliver Herzog. Beutell, A., automatic rapid mercury pump for high vacua, A., ii, 105.

experiments with mispickel, A., ii,

experiments with glaucodote, A., ii, 728.

experiments with cobaltite, A., ii, 1094.

Beutner, Reinhard, experiments with gas cells yielding current at high temperatures, A., ii, 249.

Beutner, Reinhard. See also Georg Erlwein.

Bevan, Edward John. See Charles Frederick Cross.

Bevan, Penry Vaughan, dispersion in vapours of the alkali metals, A., ii,

the absorption spectra of lithium and cæsium, A., ii, 350.

Beveridge, Wilfred William Ogilvy, estimation of the amount of tin in tinplate used for canning preserved food, A., ii, 543. Beyer, Carl. See August Morgen.

Beyer, Johannes. See Siegfried Hilpert. Beyerinck, Martinus Willem, pigments as product of oxidation by bacterial action, A., ii, 518.

Beythien, Adolf, H. Hempel, P. Simmich, W. Schwerdt, and C. Wiesemann, estimation of glycerol in fats and soaps, A., ii, 774.

estimation of formaldehyde by the ammonia process, A., ii, 776.

Bialobjeski, Tcheslas, the ionisation of liquid hydrocarbons, A., ii, 837.

Bianchi, G., and Robert Schiff, general additive reaction between alkylideneurethanes and β-dicarboxylic compounds, A., i, 977.

Biddle, Henry Chalmers. See Thorburn Brailsford Robertson.

Biéchy, Theodor. See Alfred Heiduschka.

Biehler, A. von. See Zdenko Hanns Skraup.

Bielecki, Jean, rôle of mineral substances in the formation of the anthrax protease, A., ii, 758.

Bierling, E., K. Pape, and A. Viehöver, analysis of coca leaves, A., ii, 344.

Biernacki, Edmund, sodium and potassium chlorides, A., ii, 633.

Bierry, Henri, digestive ferments for manninotriose and its derivatives,

A., i, 263. digestive ferments for hexotrioses and for stachyose, A., i, 354.

Bierry, Henri, Victor Henri, and Albert Ranc, action of ultra-violet light on glycerol, A., i, 255.

action of ultra-violet light on sucrose.

i, 524.

Bierry, Henry, and J. Larguier des Bancels, action of light of mercury lamp on solutions of chlorophyll, A., i. 735.

Bigelow, Samuel Lawrence, and F. W. Hunter, function of the walls in capillary phenomena, A., ii, 471. Billmann, Einar, isomerism and poly-

morphism, A., i, 367, 963.

Billig, Gerhard. See Fritz Ullmann.

Biltz, [Johann] Heinrich, derivatives of

isouric acid, A., i, 168.
Biltz, Heinrich, and Paul Krebs, hypocaffeine and its decomposition, A., i, 240.

Biltz, Heinrich, and Karl Seydel, a new preparation of diphenylmethylamine (benzhydrylamine), A., i, 281.

Biltz, Heinrich, and Ernst Topp, caffolide degradation of 3:7-dimethyluric acid and of theobromine, A., i, 692. caffolide degradation of 7:9-diethyluric acid 4:5-diglycol, A., i, 693.

Biltz, Wilhelm, sulphides of the rare earths. II. Lanthanum and praseodymium sulphides, A., ii, 890.

the melting point and frequency of atomic vibration of germanium, A., ii, 1097.

Wilhelm, and Fritz Caspari, Biltz,

aluminium sulphide, A., ii, 804. Biltz, Wilhelm, and E. Marcus, ammonium carnallite, A., ii, 799.

the distribution of borates in potash deposits, A., ii, 1101.

Biltz, Wilhelm, and F. Pfenning, the dialytic capacity of the colouring matters, A., ii, 375.

osmotic pressure of colloids. III. Dialysis and osmosis of solutions of

dyes, A., ii, 702.

Bingham, Eugene C., viscosity and fluidity of matter in the three states of aggregation and the molecular weight of solids, A., ii, 372.

Bingham, Eugene C., and T. C. Durham, viscosity and fluidity of suspensions of finely-divided solids in liquids, A., ii, 968.

Bingham, Eugene C., and George F.
White, the viscosity and fluidity of
emulsions, crystalline liquids, and
colloidal solutions. XI., A., ii, 858.

Binghinotto, Maria. See Tullio Gnesotto.

Bini, Leda. See Guido Barghellini.

Binz, Arthur, and K. Mandowsky, theory of indigo dyeing, A., i, 497.
Birchard, F. J. See Phæbus A. Levene.

Birnbräuer, Erich, method for the separation of the metals of the ammonium carbonate group (calcium, barium, and strontium), A., ii, 770.

Bistrzycki, [Carl Anton] Augustin, and Martin Fellmann, an o-hydroxyalde-hyde of triphenylcarbinol, A., i, 138.

Bistrzycki, Augustin, J. Paulus, and R. Perrin, condensation of p- and o-methoxymandelonitriles with phenols and phenolic ethers, A., i, 868.

Bizzell, James A. See T. Lyttleton Lyon.

Bjenkoff, N. I. See Wassili W. Scharwin.

Bjerrum (Frl.), J. See Niels Bjerrum.
Bjerrum, Niels, Planck's formula for
diffusion potentials, A., ii, 182.

the electrolytic dissociation theory, A., ii, 377.

Bjerrum, Niels, and (Frl.) J. Bjerrum, elimination of liquid potentials in measurements of electrode potentials, A., ii, 692.

Björkstén, Richard. See Max Nyman. Black, Adam, artificial pirexia produced by tetrahydro-\(\theta\)-napthylamine hydrochloride, A., ii, 636.

Black, J. W. See Thomas Cockburn. Black, Newton Henry. See Gregory

Paul Baxter.

Blackman, Frederick Frost, and Albert Malins Smith, vegetable assimilation and respiration. VIII. New method for estimating the gaseous exchanges of submerged plants, A., ii, 423.

Blackman, Frederick Frost, and Albert Malins Smith, vegetable assimilation and respiration. IX. Assimilation in submerged water-plants and its relation to the concentration of carbon dioxide and other factors, A., ii, 423.

Blackman, Philip, an improved funnel, A., ii, 796, 1081.

a funnel support, A., ii, 796, 1081. Blair, Herbert, a rapid method for the estimation of sulphur in coal-gas, or of ammonium sulphate, A., ii, 534.

Blaise, Edmond Emile, mixed organometallic derivatives of zinc and their use in organic syntheses, A., i, 415.

ketoglutaric acids and the acid-aldehydes of the succinic series, A., i, 708.

Blaise, Edmond Émile, and Henri Gault, dibasic ketonic acids, A., i, 520, 664.

Blaise, Edmond Emile, and I. Herman, β-keto-αα-dialkyl alcohols. III.. A., i, 880.

Blaise, Edmond Émile, and L. Picard, action of the chlorides of α-alkyloxy-acids on organo-metallic derivatives of zinc, A., i, 175, 260.

mode of formation of ethyl chloroethoxyacetate; use of this ester in the synthesis of α-alkyloxy-acids, A., i, 349.

Blakeley, A. G., and Edwin M. Chance, estimation of lead in alloys containing antimony and tin, A., ii, 659.

Blanc, A., ionisation produced by

phosphorus, A., ii, 455.

Blanc, Gustave, estimation of nitrites in

waters, A., ii, 930.
Blane, Gustave Louis, and Jocelyn Field
Thorpe, Komppa's synthesis of camph-

oric acid, T., 2010; P., 265. Blanck, E. See Theodor Pfeiffer. Blanck, Frederick C. See Otto Folin.

Bland, Norman, William Henry Perkin, jun., and Robert Robinson, isooxyberberine; preliminary note, P., 59.

Blangey, Louis. See Eugen Bamberger.

Blanksma, Jan Johannes, some derivatives of 3:4:5-trinitro-2-methoxytoluene, A., i, 39.

action of sodium disulphide on 4-nitro-2-methoxytoluene, A., i, 62.

di-ω-hydroxy-2:5-dimethylfuran, A., i, 75.

Blanksma, Jan Johannes. See also William Alberda von Ekenstein.

Bleibtreu, Max, the behaviour of glycogen in the ovary of Rana fusca, A., ii,

Bloch, Ignaz, Fritz Höhn, and Günther Bugge, hydrogen persulphide. Aldehydes and hydrogen persulphide, A., i, 46.

Bloch, Ignaz. See also Günther Bugge and Fritz Höhn.

Bloch, Léon, the ions and neutral particles present in certain gases when recently prepared, A., ii, 176. chemical actions and ionisation by splashing, A., ii, 357, 456.

Blümmer, Erwin. See Wilhelm Steinkopf.

Blum, Léon. See Julius Baer.

A., and Otto Zeitschel, Blumann, degradation of nerol and its constitution, A., i, 892.

Blumberg, Paul. See Otto Diels.

Blumenthal, Ferdinand, physiological action of aromatic mercury compounds. I., A., ii, 517.

biochemical investigation of aromatic

mercury compounds, A., ii, 1017. Blumenthal, Ferdinand, and Ernst Jacoby, the detection and formation of aromatic substances in the body. II. The behaviour of indole and scatole in rabbits, A., ii, 58.

Blumenthal, Ferdinand, and Emanuel Navassart, atoxyl. V., A., ii, 636.

Blumenthal, Ferdinand, and Oppenheim, the influence of potassium iodide on the accumulation of mercury in the liver, A., ii, 1014.

Blumenthal, Herbert. See Alfred Stock. Blumenthal, Philip L. See Philip E.

Browning.

Bock, Johannes, excretion of the alkali metals in purine diuresis, A., ii, 631. Bode, A. See St. Engel.

Bodecker, M. von. See Daniel Vorländer. Bodenstein, Max. See Gunnar Starck. Bodroux, Fernand, action of ethereal

salts on the monosodium derivative of phenylacetoritrile, A., i, 129. action of acid chlorides and anhydrides and of ketones on the sodium de-

rivative of phenylacetonitrile, A., i,

action of anisaldehyde and piperonaldehyde on the sodium derivative of phenylacetonitrile, A., i,

Bodroux, Fernand, and Felix Taboury, bromination of some hydroaromatic compounds, A., i, 533.

bromation of cyclohexane, A., i, 622. action of bromine in presence of aluminium bromide on cyclohexanol and cyclohexanone, A., i, 779.

Böcker, E. See Roland Scholl.

Böcker, Erich, and Alfred Hahn, new constituent of angelica root oil, A., i, 313.

essential oil of the dwarf pine, A., i, 549.

Böddener, K. H., and Bernhard Tollens, the carbohydrates of white pepper, A., ii, 64.

a modification of the furfuraldehyde method of estimating pentosans, A., ii, 75.

Bödtker, Eyvind, estimation of free acids in fats, A., ii, 666.

Boehm, Rudolf, preparation of curarine, A., i, 154.

the chemistry of the contents of the intestine, A., ii, 749.

Boehncke, Karl Ernest, the relations between the sugar-content of nutrient media and nitrogen metabolism by bacteria, A., ii, 638. Boehner, Reginald. See Emil Fischer.

Boehringer & Söhne, C. F., preparation of narcotics [glyceryl ethers], A., i,

preparation of glycol monosalicylate, A., i, 130.

preparation of oxalates from alkali formates, A., i, 419.

preparation of diglycollic acid esters of phenols and phenolic derivatives, A., i, 947.

preparation of acyl derivatives of o-salicyloxybenzoic acids,

preparation of diglycollic esters of quinine, A., i, 1011.

Boeke, Hendrik Enno, iron-salts in the potash-salt deposits, A., ii, 293. Boennecke, A. See Karl Auwers.

Boeris, Giovanni, crystallography of some organic additive compounds, A., i, 290.

Böeseken, Jacob, action of bromine on diphenyl sulphide, diphenyl sulphoxide, and diphenylsulphone, A., i, 41.

Friedel and Crafts' reaction, A., i, 531. action of sulphur on aromatic sulphones, A., i, 533.

catalysis, A. ii, 384.

Böeseken, Jacob, and D. A. Wittop Koning, Friedel and Crafts' reaction. XI. Action of sulphur monochloride on benzene, chlorobenzene, and toluene, A., i, 532.

Böeseken, (Mlle.)Jacob, \mathbf{and} Langezaal, catalytic action. IV. Comparison of the action of various catalytic agents. II. Acetylation of carbamide, A., i, 22.

Böeseken, Jacob, (Mlle.) Lichtenbelt, Milo, and van Marlen, action of hydrogen peroxide on a-diketones, A., i, 523.

Böeseken, Jacob, and H. J. Prins, synthesis of as-heptachloropropane from tetrachloroethylene and chloroform with the co-operation of aluminium chloride, A., i, 173.

Böeseken, Jacob, and A. Schweizer, the velocity of the ring opening in connexion with the composition of the unsaturated ring systems, A., ii, 197.

Böttcher, Bruno, and Stefanie Horowitz, rearrangement of quinine by sulphuric

acid, A., i, 1011. Böttcher, B. See Zdenko Hanns Skraup. Bogert, Marston Taylor, preparation of 2:4-diaminoisophthalic acid and derivatives, A., i, 983.

Bogert, Marston Taylor, George Denton Bell, and Carl Gustave Amend, quinazolines. XXVI. Synthesis of some stilbazoles, hydrazones, and Schiff bases in the 4-quinazolone group, A., i, 162.

Bogert, Marston Taylor, Ross Aiken Gortner, and Carl Gustav Amend, quinazolines. XXVII. Syntheses of 3-aminoaryl-4-quinazolones from acylanthranils and aromatic diamines, A., i, 580.

Bogert, Marston Taylor, and Louis Elsberg Wise, some derivatives of p-aminobenzonitrile, A., i, 46.

Boggs, C. R. See Arthur Amos Noyes. Bogoluboff, P. See Henrik Wdowiszewski.

Boie, Heinrich. See August Michaelis. Boismenu, Etienne, hypobromous [acid and] amides, A., i, 957.

Bokorny, Thomas, intravital caffeine reactions, A., ii, 142.

microchemical detection of albumin, A., ii, 236.

action of methyl and other alcohols on green plants and micro-organisms A., ii, 522.

the toxicity of the fatty acids and other decomposition products of the fats, A., ii, 756.

the nutrition of green plants with formaldehyde and formaldehydeyielding substances, A., ii, 1021.

Bokorny, Thomas. See also Oscar Loew. Bolland, A., a new separating funnel, A., ii, 385.

microchemical studies. V., A., ii, 551. Bolser, Charles E., and J. W. E. Glattfeld, estimation of chlorine in presence of hydrochloric acid, A., ii, 435.

Bolton, Werner von, biological action of thorium, A., ii, 1118.

Boltwood, Bertram Borden, separation of ionium and actinium from certain residues, and on the production of helium by ionium, A., ii, 359.

Boltwood, Bertram Borden, and Ernest Rutherford, production of helium by radium, A., ii, 953.

Boltz, G. E., washbottle for continuous hot water supply, A., ii, 433.

Bondzyński, Stanislaus, the oxyproteic acids and their part in animal metaholism, A., ii, 308.

Bongiovanni, Corrado, the reactions of van Deen and Adler, A., ii, 676.

electrical conductivity of the system ferric chloride-ammonium thiocyanate, A., ii, 1052.

Bongrand, J. Charles. See Charles Moureu.

Bonner, Walter D., binodal curves, plait points, and tie lines in fifty systems, each consisting of water and two organic liquids, A., ii, 26.

Bonnerot, S. See Georges Charpy.

Bonsib, Roy S. See Frank Curry Mathers.

Boon, Alfred Archibald. See Forsyth James Wilson.

Boord, Cecil. See William McPherson. Boorsma, P. A., phosphates with organic linkings, A., ii, 427.

Borar, David, some reducing actions of

mercury, T., 1414; P., 128.

Borch, N. S., a new volumenometer for determining the specific gravity of

cement, A., ii, 539.

Bordas, Fréd., and F. Touplain, estimation of phosphorus in milk ash, A.,

estimation of phosphorus in milk, A.,

original acidity of milk, A., ii, 631. Borghi, Mario. See Arrigo Mazzucchelli.

Borgström, Johan Henrik Leonard, chromite from the Marjalahti meteorite. Analcite from Brodtorp, A., ii, 120.

See E. Baroni. Borlinetto, O.

Bornemann, Karl, some general properties of the binary equilibrium diagram, A., ii, 195.

Bornemann, Karl, and H. Schirmeister. the separation of titanium from the heavy metals, A., ii, 231.

Bornhardt, C. See Wi/helm Schlenk. Bornstein, Adele, the influence of compressed air on blood-formation, A., ii,

Bornwater, J. Th., action of oxalyl chloride on amines and amides, A., i, 616.

Borrien, V., occurrence of hæmatoporphyrin in the meconium, A., ii, 133.

Borsche, Walther [Georg Rudolf], δ-phenylbutyl ketones and δ-phenylvaleric acid, A., i, 880.

tetrahydropiperine and tetrahydropiperic acid, A., i, 1018.

Borsche, Walther, and D. Rantscheff, reactions of 1-chloro-2:6-dinitrobenzene, A., i, 329.

Borsche, Walther, and R. Schmidt, Δ^{1} tetrahydrobenzaldehyde from cyclohexanone, A., i, 59.

Borschim, S., the influence of lecithin on absorption by the skin, 1007.

Bose, Emil [Hermann], experiments relating to the "swarm" theory of anisotropic liquids, A., ii, 184.

Bose, Emil, and Margrete Bose, the turbulence viscosity of different liquids, A., ii, 257.

Bose, Margrete. See Emil Bose.

Boselli, J., speed of reaction in heterogeneous systems, A., ii, 196.

velocities of reactions in gas-liquid systems, A., ii, 265.

the inulinase of Aspergillus niger, A., ii, 1022.

Bossuet, Robert. See Louis Hackspill. Bostock, Gertrude D., deamidisation, A., ii, 1112.

Bosworth, Alfred W., and M. J. Prucha, the fermentation of citric acid in milk, A., ii, 318.

Bosworth, Rowland S. See Ralph G. van Name.

Botta, W., mixed crystals of sodium chloride and silver chloride (huanta-

jayite), A., ii, 293.
Boubnoff, N., and Philippe Auguste Guye, formation of nitrosyl chloride at low temperatures by Gay Lussac's action: liquidus curve of the system nitrosyl chloride—chlorine, A., ii, 599.

Bouchonnet, A., action of heat on ochres, A., ii, 495.

Bougault, J., transformation of δ -phenyl- Δ^{α} -pentenoic acid into the $\Delta\gamma$ isomeride, A., i, 202.

wax s of the Coniferæ, A., ii, 223. Bougault, J., and Charles Charaux, lactarinic acid and ketostearic acid isolated from fungi of the genus Lactarius, A., i, 835. lactarinic acid, A., i, 949.

Bouin, Paul, and Paul Ancel, lipoid nature of an active substance secreted by the corpus luteum of mammals, A., ii, 129.

Boulud, Raymond. See Raphael Lépine. c. ii.

Bounoure, L., comparative study of four digestive diastases from certain species of Coleoptera, A., ii, 214.

Bourbon, A. See Emile Vigouroux.

Bourdet, L., assay of chloral, A., ii, 943. Bourgeois, E.ouard, and A. Fouassin, reactivity of aromatic brome-compounds. II. Formation of aromatic disulphides of the types R'S'R'S'R and R'S'R'S'R', A., i, 963.

Bourgeois, Edouard, and P. Huber, re-

activity of aromatic bromo-compounds. III. Action of bromonitrobenzenes on

phenylmercaptides, A., i, 964.

Bourion, François. See Georges Darzens. Bourquelot, Émile [Élie], and MarcBridel, action of invertase of polysaccharides derived from lævulose, A., i, 512.

action of emulsion on gentiopicrin in

alcohol, A., i, 1053.

Bourquelot, Emile, and (Mlle.) A. Fichtenholz, the glucoside of leaves of the pear tree, its presence in the leaves of different varieties, its detection in the trunk and root, A., i, 803. the glucoside of pear leaves [arbutin],

and its function in producing autumn tints, A., ii, 143.

Bousfield, William Eric. See William Robert Bousfield.

Bousfield, William Robert, and William Eric Bousield, the specific heat of

water, A., ii, 580.

Bousfield, William Robert, and Thomas
Martin Lowry, the purification and properties of acetic acid, T., 1432; P., 187.

Boutaric, A., cryoscopy in fused sodium thiosulphate, A., ii, 1060.

Bouty, Edmond [Marie Leopold], dielectric cohesion of the rare monatomic

gases, A., ii, 458.
Bouveault, Louis, and Ferdinand Levallois, synthesis of βζ-dimethylheptanβδζ triol and of βγε-trimethylhexanβγε-triol. II., A , i, 3.

Bouveault, Louis, and Réné Locquin, action of magnesium amalgam on acetone, A. i, 2.

 $\beta \gamma \epsilon$ -trimethylhexan- $\beta \gamma \epsilon$ -triol and some

of its derivatives, A., i, 2.

Bouyssy, M. See H. Henriet. Bowden, Richard Charles, studies of the constitution of soap in solution: the electrical conductivity of sodium stear-

ate solutions, T., 191; P., 5.

Bowman, Herbert Lister. See Herbert Edmund Clarke.

Bowser, Leon T., titrimetric estimation of phosphorus in small amounts, A., ii, 437, 1135. 78

Bowser, Leon T., potassium: its detection as the cobaltinitrite, A., ii, 1031.

estimation of very small amounts of calcium by means of potassium permanganate, A., ii, 1031.

Boycott, Arthur Edwin, the rate of regeneration of hæmoglobin after hæmorrhage, A., ii, 1108.

Boycott, Arthur Edwin, and Robert Alexander Chisolm, the influence of underfeeding on the blood, A., ii,

Boyd, Robert. See George Gerald Henderson.

Boyle, (Miss) Mary, iodobenzenemono-sulphonic acids. Part III. 2:3-Diiodo- and 2:3:4:5-tetra-iodobenzenesulphonic acids, T., 325; P., 9.

Boyle, R. W., the volatilisation of radium emanation at low temperatures, A., ii, 6.

the behaviour of radium emanation at low temperatures, A., ii, 569.

Boylston, Arthur Clarence. See Gregory $\pmb{P}aul$ Baxter.

Boynton, Clarence Norman. See Frank Austin Gooch.

Brach, H. See E. Lenk.

Brachmann, K. See Richard Stoermer. Bradley, Walter Minor. Ward Foote. See Harry

Brady, Oscar Lisle, compounds of copper benzoate with pyridine and quinoline,

Bräutigam, E. F. See Richard Stoermer.

William Henry, and Harry Bragg, Leonard Porter, energy transformation of X-rays, A., ii, 683.

Brahmachari, U. N., the low regulating

hæmolysis of erythrocytes in hyposmotic saline solution or distilled water, A., ii, 213.

Brand, Kurt, two new forms of 2-nitro-6-hydroxylaminotoluene, A., i, 713.

Brass, Kurt. See Rudolf Pummerer. Braun, Julius von, action of cyanogen bromide on tertiary bases containing the phenylethyl and phenylpropyl groups, A., i, 34.

cyclic sulphides, A., i, 75.

the relative stability of the pyrrolidine ring, A., i, 563.

decomposition of quaternary ammonium hydroxides. I., A., i,

Braun, Julius von, and H. Deutsch, aiodo- Δ^{δ} -hexene, A., i, 938.

Braun, Julius von, H. Deutsch, and O. Kruber, syntheses in the fatty aromatic series. II., A., i, 968.

Braun, Julius von, and Wladislaus Sobecki, synthesis of compounds of the normal amyl series from piperidine, A., i, 128.

aliphatic halogen compounds from a-

pipecoline, A., i, 413. preparation of chloro- and bromocompounds from organic bases, A., i, 597.

the Grignard reaction in its application to dihalogen compounds, A., i, 701. preparation and fission of dihydroindole, A., i, 747.

primary aliphatic dinitro-, nitronitrite, and dialdoxime compounds,

A., i, 830.

Brautlecht, Charles Andrew, hydantoins. IV. 2-Thio-1-phenylhydantoins from some a-amino-acids, A., i, 922.

Brautlecht, Charles Andrew. See also Treat Baldwin Johnson and Henry Lord Wheeler.

Bray, William Crowell, effect of salts on the solubility of other salts. IV. Quantitative discussion of the solubility of uni-univalent salts in the presence of other salts, A., ii, 1075.

Bray, William Crowell, and E. L. Connolly, the hydrolysis of iodine and of bromine; a correction, A., ii, 864.

Bray, William Crowell, and Franklin L. Hunt, conductivity of aqueous solutions of sodium chloride, hydrochloric acid, and their mixtures, A., ii, 688.

Bray, William Crowell, and W. J. Winninghoff, effect of salts on the solubility of other salts. III. Solubility of thallous chloride in solutions of potassium nitrite, potassium sulphate, and thallous sulphate at 25°, A., ii, 1075.

Bray, William Crowell. See also Arthur Amos Noyes.

Bredig, Georg, and A. Marck, colloidal manganese dioxide and its behaviour towards hydrogen peroxide, A., ii, 399.

Bredt, [Conrad] Julius, constitutions of Woringer's lauronolic acid, dihydrolaurolactone (campholactone), laurolene, A., i, 417.

Bredt, Julius, and W. Hilbing, &camphor (bornylone) from bornylene carboxylic acid, A., i, 657.

Bredt, Julius, and Paul Marres, lauronolic and allocampholytic acids, A., i, 416.

Brehme, P. See Rudolf Weissgerber. Breinl, Ferdinand, the proteins of serum, A., ii, 741.

Breitweiser, W. See Theodor Zincke.

Bremer, Karl, action of potassium permanganate and of bromine on 1:4:5-trimethyluracil, A., i, 160.

trimethyluracil, A., i, 160.

Bressanin, G., and E. Segrè, action of alkaline solutions on trichlorinated organic compounds, A., i, 830.

Bressanin, Giuseppe, method for the detection and estimation of arsenic in organic compounds, A., ii, 1133.

organic compounds, A., ii, 1133. detection, separation, and estimation of arsenic and antimony, A., ii, 1134.

Bresson, M. See Pierre Achalme.

Breteau, Pierre, hydrogenations in presence of palladium; applications to phenanthrene, A., i, 123, 776.

hydrogenation by means of (1) spongy palladium and sodium hypophosphite, (2) nickel and sodium hypophosphite, A., i, 533.

hydrogenation by means of calcium and alcohol, A., i, 625.

method for complete destruction of organic matter in the detection of mineral poisons, A., ii, 226.

Bretschneider, A. See E. Frank.
Breuning, Wilhelm. See Fritz Reitzenstein.

Brezina, Aristides, meteoric stone of Mern, Seeland, A., ii, 48.

Brichaux, A., law relating to the solubility of ammonia [in water] at different temperatures and pressures, A., ii, 390.

Bridel, Marc, meliatin, a new glucoside hydrolysable by emulsin, obtained from the marsh trefoil, A., i, 659.

variations in the composition of the root of the gentian during a year's growth, A., ii, 426.

Bridel, Marc. See also Emile Bourquelot.

Briem, Hermann. See Friedrich Strohmer.

Briggs, Samuel Henry Clifford, the isomerism of ferrocyanides, T., 1019; P., 24.

Brigl, Percy. See Franz Sachs and Hermann Steudel.

Brindejonc, Georges, alkaloid of Eschscholtzia californica, A., i, 222.

scholtzia californica, A., i, 222.

Briner, Emil, criterion of the formation of a compound in the condensation of two gases, A., ii, 705.

Brinton, Paul H. M. P. See Heinrich Fresenius.

Brioni, Arnaldo, constitution of Prussianblue, A., i, 618

Brissemoret, Alphonse Marc, and A. Joanin, physiological action of organic bases, A., ii, 137.

Brizard, L. See Maurice de Broglie.

Brodtkorb, Th. See Hermann Ost.

Brock, A. van der, Mendeléeff's "cubic" periodic system of the elements, and the arrangements of the radio-elements in this system, A., ii, 709.

Broek, Carl Ten. See Christian Archibald Herter.

Brönsted, J. N., equilibria in the system water—ammonium chloride—lead chloride. A., ii. 381.

chloride, A., ii, 381. chemical affinity. V. The formation of potassium lead sulphate, A., ii, 856.

Broglie, Maurice de, a special case of distribution of ionisation in a gas; thin superficial layer containing ions of both signs, A., ii, 573.

Broglie, Maurice de, and L. Brizard, radiation from quinine sulphate, ionisation, and luminescence, A., ii, 174.

the mobility of ions produced in air by sulphate of quinine in process of hydration, A., ii, 356.

certain ionisation effects observed in gases in presence of non-radiative substances; activity and luminescence of quinine sulphate, A., ii, 837.

Bromberger, H. See Alexander Tschirch.

Bronie wski, Witold, electrical properties of aluminium-magnesium alloys, A., ii, 115.

Broniewski, Witold, and L. Hackspill, electrical properties of alkali metals, rhodium, and iridium, A., ii, 1055.

Brooks, Benjamin T., natural dyes and colouring matters of the Philippines, A., i, 553.

champaca oil, A., i, 1000.

Brossa, Alessandro. See Richard Willstätter.

Brouwer, H. A., molengraaffite, a new mineral inlujaurite from the Transvaal, A., ii, 296.

Browinski, Józef, the fate of cholesterol in the animal organism, A., ii, 305.

Brown, Alexander R. See Robert A. Houstoun.

Brown, B. Marion. See James F. Norris.

Brown, Joseph Hallam. See John Albert Newton Friend.

Brown, Percy E. See Jacob Goodale Lipman.

Browne, Arthur Wesley, and A. E. Houlehan, behaviour of the hydronitrogens [nitrogen hydrides] and their derivatives in liquid ammonia. II. Ammonolysis of certain hydrazine salts, A., ii, 1085.

Browne, Arthur Wesley, and A. E. Houlehan, behaviour of the hydronitrogens [nitrogen hydrides] and their derivatives in liquid ammonia. III. Action of ammonium trinitride on certain metals, A., ii, 1085.

Browne, Arthur Wesley, and T. W. B. Welsh, behaviour of the hydronitrogens [nitrogen hydrides] and their derivatives in liquid ammonia. Ammonolysis of hydrazine sulphate, A., ii, 1084.

Browning, Carl Hamilton, and John Cruickshank, the action of cholesterol derivatives with lecithin in the syphilis reaction, 1014.

the action of cholesterol and its derivatives with lecithin as syphilitic antigen and as hæmolysin with

cobra venom, A., ii, 1118.

Browning, Carl Hamilton, and John Cruickshank, and Walter Gilmour, the action of lecithin from different sources in the Wassermann reaction, A., ii, 312.

Browning, Carl Hamilton, and Ivy Mc-Kenzie, the Wassermann reaction in rabbits infected with trypanosomes of Nagana, and the effect of treatment with arsenophenylglycine (Ehrlich), A., ii, 59, 219.

Browning, Carl Hamilton, and G. Haswell Wilson, the alterations in hamiltonia.

hæmolytic immune-substance which occur during immunisation, A., ii, 997.

Browning, Philip Embury, detection of silicates, fluorides, and silicofluorides, A., ii, 1030.

Browning, Philip Embury, and Philip L. Blumenthal, decomposition of the cerium earth double sulphates with the alkali sulphates by fusion with charcoal, A., ii, 890.

detection of certain elements which form insoluble sulphates: barium, strontium (calcium), and lead, A., ii,

Brüll, Leo, the influence by salt ions of autolysis, A., ii, 54.

Brüninghaus, L., Stokes' law and a general relation between absorption and phosphorescence, A., ii, 562.

Brugsch, Theodor, and K. Kawashima, the influence of hæmatoporphyrin, hæmin, and urobilin on the forma-tion of bile-pigments. III., A., ii,

Brugsch, Theodor, and S. Yoshimoto, formation of bile-pigment from the blood. II., A., ii, 629.

Bruhat, G., rotatory dichroism of a definite organic compound (l-bornyl diphenyldithiourethane), A., ii, 829.

Brunck, Otto, gas-volumetric estimation of hydrogen, A., ii, 149.

use of the Edison accumulator in electro-analysis, A., ii, 1136.

Brune, R. See Theodor Zincke.

Brunel, Roger Frederick, equilibrium between isobutyl and tert.-butyl bromides at elevated temperatures, A., ii. 413.

course of the intramolecular transformations between isobutyl and bromides, tert. butyl and catalytic actions thereby coming into play, A., ii, 974.

Bruner, Ludwik, and S. Czarnecki,

photo-kinetics of bromine substitution. I. The course of the photo-reaction, A., ii, 241.

Bruner, Ludwik, and J. Kozak, photocataly-is; action of light on mixtures of uranium salts and oxalic acid, A., ii, 564.

Bruner, Ludwik, and M. Królikowski, the photo-chemical inversion of maleic acid, A., i, 9.

Bruner, Ludwick, and Z. Lahociński, photo-kinetics of bromine substitution. The course of and the factors which influence the photo-chemical after-effect, A., ii, 242.

Bruni, Giuseppe, and D. Meneghini, formation of solid metallic solutions by diffusion in the solid state, A., ii, 703, 860.

Bruns, D. See Ernst Schmidt.
Brustier, V. See Jules Aloy.
Bubanović, F. See Hartog Jakob Ham-

burger.

Buchner, Eduard, and Paul Schulze, ethyl diazoacetate and p-xylene, A., i,

Buchtala, Hans, the sulphur and cystine in the keratin of birds, A., i,

the shield of Chelone imbricata, A., ii, 1009.

Buchtala, Hans. See also Fritz Pregl. Buckmaster, George Alfred, behaviour of colloidal metals (platinum, gold, silver, and palladium) prepared by Bredig's method on solutions of guaiaconic acid, A., i, 390.

the pseudo-peroxydase reaction between hæmoglobin, its derivatives, and guaiaconic acid (guaiacum reaction for blood pigment), A., i,

390.

Budde, Th., the estimation of caoutchouc as tetrabromide, A., ii, 545.

Budy, K. See Johannes Herzog.

Büchner, Ernst Hendrik, investigations on the radium contents of rocks.

A., ii, 243.

Bülow, [Theodor] Carl [Heinrich], and Hermann Göller, ethyl arylazoacetonedicarboxylates and their isomeric condensation products with hydrazines, A., i, 1043.

Bülow, Carl, and Karl Haas, synthesis of derivatives of 1:2:7-pyrazopyridine [1:2:7-benztriazole]: a new series of homo (C C) condensed, heterodicyclic compounds, A., i,

peculiar reactions of the diazo-com-

pound of p-aminobenzeneazosali-cylic acid, A., i, 338. Bülow, Carl, and Arnulf Hecking, oarylazo-compounds of heterocyclic phenols: 4-arylazo-5-hydroxy-3methylisooxazole, A., i, 244.

conversion of arylamineazoisooxazolones into azopyrazolones, A., i, 403.

Bürgin, James. See Hans Rupe. Bufalini, Giovanni, characteristic reactions of toad poison, A., ii, 348.

Bugge, Günther, and Ignaz Bloch, persulphides of aldehydes, A., i, 60.

Bugge, Günther. See also Ignaz Bloch. Buglia, Giuseppe, the replacement of calcium in so-called physiological fluids. (Experiments on the excitability of striated muscles of warmblooded animals, and the variations of tonus of the atrium in Emys europea, A., ii, 131.

investigations on smooth muscle. IV. The replacement of calcium in socalled physiological fluids. (Experiments on smooth muscle; dog's

oesophagus), A., ii, 131. the surface-tension of lymph. I. and

II., A., ii, 1113. Bulla, Alfred. See Walter Herz.

Buraczewski, Józef, and L. Krauze, oxyprotosulphonic acid, A, i, 408.

Buraczewski, Jósef, L. Krauze, and A.

Krzemecki, diastase, A., i, 1052.

Burger, Oskar Krafft Heinrich, the sensitiveness of pentamminenitroso-cobalt salts to light, P., 160.

Burgess, Laurie Lorne. See Gregory Paul Baxter.

Burgess, Maurice John, and Richard Vernon Wheeler, the volatile constituents of coal. Part II., T., 649; P., 70.

the lower limit of inflammation of mixtures of the paraffin hydrocarbons with air, T., 2013; P., 262.

Burmann, James, fresh gentian root, and a preparation from the same, "Dialysé Golaz," A., ii, 528. manganese in Digitalis purpurea, A.,

ii, 1125.

Burmeister, Frerik. See Georg Wiegner. Burmeister, Fritz. See Berthold Rassow. Burnham, Gerald. See Treat Baldwin Johnson.

Burri, Robert, and H. Schmid, the influence of the cooling of milk on the so-called Schardinger reaction, A., ii,

1115. W., chemical factors of Burridge, fatigue, A., ii, 131.

rôle of potassium salts in frog's muscles, A., ii, 628.

lactic acid and cardiac muscle, A., ii,

nicotine and curarised muscles, A., ii,

Burt, Frank Playfair, and Francis Lawry Usher, the relative atomic weights of nitrogen and sulphur, A., ii, 389.

Burton, R. Cooksey, formation of kaolinite in some coal-measure shales of Northumberland, A., ii, 735.

Busch, Max [Gustav Reinhold], and Georg Hefele. hydrazones of phenacylamines, A., i, 582.

Busch, Max, and Hermann Krapf, isomeric hydrazones of dithiocarbonic esters, A., i, 811.

Busch, Max, and Otto Limpach, intramolecular changes, A., i, 334. carbamide derivatives of phenylhydrazine, A., i, 689.

Busch, Max, and Richard Ruppenthal, Pechmann's isomeric hydrazidines, A.,

Buschmann, E., basic constituents of Helianthus annuus, A., ii, 324.

Buschueff, L. V., action of piperidine on d-pinene chloro-oxime, A., i, 313.

Butavand, F., absorption and secondary radiation of cathodic rays, A., ii,

Butler, B. S., and Waldemar Theodore Schaller, thaumasite from county, Utah, A., ii, 209.

Butscher, Egon, substituted rhodanic acids and their condensation products with aldehydes and ketonic substances. XI., A., i, 333.

Buttlar, Richard (Freiherr) von. Hermann Pauly.

Butzbach, G., and G. Fenner, simplified apparatus for estimating carbon in iron, A., ii, 937.

Buzio, Giulio. See Giuseppe Oddo.

Byers, Horace Greeley, and Agnes Fay Morgan, influence of the magnetic field on passive nickel and iron, A., ii, 1057.

Bygdén, Artur, preparation of methyl bromide, A., i, 413.

tetra-alkylsilicanes, A., i, 845.

Sergius, n-butylhexyl-Byrtschenko, carbinol, A., i, 1.

Bysoff, B. V., vulcanisation of caoutchouc, A., i, 314. cold vulcanisation, A., i, 390.

Caccia, Piero, methods of estimating trimethylamine in urine. Contribution to the study of lecithin metabolism, A., ii, 550.

Caccia, Piero. See also Aldo Patta. Cáceres, Toribio, classification of the

elements, A., ii, 593. Cahen, Edward, and Harry Frank Victor Little, Waldemar Fisher's modifica-tion of Volhard's method for the volumetric estimation of manganese, and its comparison with other well-known methods, A., ii, 229.

Caille, E., modification of the Friedel and Crafts' reaction admitting of the preparation of α-naphthyl ketones to the exclusion of the β -isomerides, A.,

i, 792.

Cailletet, Louis, origin of carbon assimilated by plants, A., ii, 642. Cain, John Cannell, p-nitrosomethyl-

ethylaniline: a new intermediate product for the manufacture of dyes,

A., i, 437. Caland, P. See Arnold Frederik Holle-

Calcagni, Gennaro, and Luigi Bernardini, basicity of the organic acids containing alcoholic hydroxyl groups, A., ii, 1078.

Calcagui, Gennaro. See also Arnaldo Piutti.

Callan, Thomas. See Frederick Belding

Power. Calliess, Franz Wilhelm, ephedrine and

ψ-ephedrine, A., i, 76. Calliess, Franz Wilhelm. See also Ernst

Schmidt. Calvo, Antonio Reyes, the relation of the electrical conductivity of some silver

amalgams to temperature, A., ii,574. the conductivity of a cadmium amalgam, A., ii, 575.

Calzolari, Filippo, thorium peroxide, A., ii, 404.

Calzolari, Filippo. See also Giuseppe A. Barbieri.

Cambi, Livio, action of hydrogen sulphide on fulminic acid, A., i, 429. so-called perferricyanides, A., i, 430. amorphous states of silicon, A., ii, 600. silicon sulphides. II., A., ii, 601.

Cameron, Frank Kenneth, and William J. McCaughey, apatite and spodiosite,

A., ii, 734.

Cameron, Frank Kenneth, and Harrison Eastman Patten, solubility of lime in aqueous solutions of sucrose and of glycerol, A., i, 179.

Campbell, Edward de Mille, distribution of hydrogen sulphide in a large laboratory and the use of aluminium stop-

cocks, A., ii, 596.

Campbell, Edward de Mille, and William B. Hurley, modified colorimeter and some tests of its accuracy, A., ii, 765.

Campbell, J. Argyll, the effects of certain animal extracts on the blood vessels, A., ii, 315.

action of chloroform on blood-vessels, A., ii, 738.

Campbell, Norman, 5-rays, A., ii, 841. the spontaneous charging of polonium, A., ii, 959.

Campetti, Adolfo, mobility of the positive ions produced in the oxidation of copper, A., ii, 356.

Campo y Cerdan, Angel del. See Jaime Ferrer Hernández.

Canaval, Richard, microchemical analysis of silicates, A., ii, 1029.

Canfield, Frederick A., thomsonite in

New Jersey, A., ii, 615. Cann, Jessie Y. See John Livingston

Rutgers Morgan.

Cannegieter, H. G., ionisation of gases by light emitted from Geissler tubes; the existence of selective effects in the ionisation, A., ii, 455.

Cantoni, C. See Guido Pellizzari.

Cappenberg, H., estimation of halogens in lipoids, A., ii, 927. Caramelli, R. See Oscar Tobler.

Cardarelli, Eugene James. See Henry Augustus Torrey.

Cardell, Ivor Southwell, and Fred Thomas, synthesis of ammonia by heat, P., 138.

Cardoso, Ettore, densities of co-existing phases (orthobaric densities) and the diameter for sulphur dioxide in the neighbourhood of the critical point, A., ii, 854.

Carles, P., estimation of amylaceous substances in dressed provisions,

A., ii, 340.
assay of vintage marcs for tartaric acid. Separate estimation of potassium hydrogen tartrate and calcium tartrate, A., ii, 342.

Carlier, A., manurial value of manganese sulphate, A., ii, 147.

Carlier, Edmond William Wace, and C. Lovatt Evans, composition of the secretion of Timarcha tenebricosa, A., ii, 908.

Carlson, Anton Julius, and Fred M. Drennan, passage of the internal secretion of the pancreas of the fœtus into the blood of the mother, A., ii,

Carlson, Anton Julius, and Clara Jacobson, nature of parathyroid tetany, A., ii, 632.

Carlson, Anton Julius, J. F. Rooks, and J. F. McKie, experimental hyperthyroidism, A., ii, 217.

Carlson, Anton Julius, A. Woelfel, and H. W. Powell, physiology of lymph. XVI. Local hæmodynamic action of tissue metabolites, A., ii, 620.

Carlson, Tor, rate of dissolution in gasliquid systems, A., ii, 589.

Carnevali, Federico. See Federico Gio-

Caro, Nikodem, Richard Jacoby, and Bernhard Schück, calcium cyanamide, A., i, 118.

Caro, Nikodem, and Bernhard Schück, estimation of cyanamide, dicyanodiamide, and carbamide in calcium cyanamide (kalkstickstoff), A., ii, 162.

Caron, Hubert, detection of nitrates with

diphenylamine, A., ii, 767.

Caron, Hubert, and Désiré Raquet,
analysis of nitrates by Grandval
and Lajoux's method. Estimation of nitrates in water by a sulphosalicylic reagent, A., ii, 69.

assay of bismuth salicylate, A., ii,

Carpenter, Harold C. H., the growth of cast irons after repeated heatings, A., ii, 1091.

Carpenter, John Lattimore. See Harmon Northrop Morse.

Carpenter, Thorne M., the increase of metabolism due to the work of typewriting, A., ii, 621.

Carrasco, Oreste, nature of the peroxides of zinc, A., ii, 282.

Carré, Paul, Contardi's polyphosphoric esters of mannitol, quercitol, inositol, and dextrose, A., i, 263.

Carrez, C., separation of urobilin by means of talc and its detection, A., ii,

Carroll, E. C. See A. D. Emmett. Carson, Charles M. See Alexander Smith.

Carter, Harry, radioactive properties of high temperature flames, A., ii, 1046.

Casanova, Carlo, behaviour of iodine towards terpine hydrate, encalyptol, and terpineol, A., i, 218.

lecithins ex ovo, a characteristic colour reaction for them and a change which they always undergo, A., ii, 673.

Casolari, Angelo, phenyl thiocarbonate. A., i, 197.

Caspari, Fritz, lecture apparatus [action of acids on pure and impure zinc], A., ii, 270,

Caspari, Fritz. See also Wilhelm Biltz. Cassella & Co., Leopold, preparation of 3:6-diaminoacridine, A., i, 504.

[preparation of 4-hydroxy-2-m-aminophenyl-a-naphthiminazole-7-sulph-

onic acid], A., i, 682. preparation of halog halogen-substituted indophenol derivatives from carbazoles and p-nitrosophenols, A., i, 1025.

Castellana, Vincenzo, and R. Ferrero, some derivatives of dicamphor, A., i,

Cathcart, Edward Provan, reflux from intestine to stomach, A., ii, 749.

Cathcart, Edward Provan. Diarmid Noel Paton.

Cavazza, Luigi Ermanno, microchemical examination of tannins and natural colouring matters, A., ii, 142.

Cavazzi, Alfredo, quantitative estimation of copper in commercial sulphate by means of alkali hypophosphites, A., ii, 1137.

Caven, Robert Martin, and Henry Julius Salomon Sand, the dissociation pressures of alkali bicarbonates. Part I. Sodium hydrogen carbonate, T., 1359; P., 147.

Ceccarelli, O. See Mario Levi-Malvano. Cederberg, Ivan W., surface tension of solution of salts in alcohol, A., ii,

general relationship between heat of vaporisation, vapour pressure, and temperature, A., ii, 854.

[variation of vapour pressure with temperature], A., ii, 966.

Cegielskij, Roman, the boiling of electrolytes on the passage of an [electric] current, A., ii, 463.

Centanni, Eugenio, the stimulating action of lipoids on the action of liver diastase, A., ii, 54.

Centnerszwer, Mieczyslaw, experiments on the inertness of oxygen towards phosphorus, A., ii, 201.

Cerero, Rafael, and Enrique Bayo, analysis of artificial pearls and rubies, A., ii, 824.

Cermak, Paul, the Thomson effect and its variation with temperature in lead, mercury, tin, zinc, cadmium, and aluminium, A., ii, 177.

Cermak, Paul, and Hans Schmidt, thermoelectric forces in the transition from the solid to the liquid state of

aggregation, A., ii, 1055.

Cerný, C., hypericin (hypericum red), A., i, 803.

Cervello, Carlo, influence of antipyretics on the proteins of blood-serum, A., ii, 409.

picrotoxinin and some of its derivatives, A., ii, 419.

Cesaris, Marcello. See Giuseppe Oddo. Cesaris, Pietro de, the binary systems, CuCl-AgCl, CuCl-NaCl, CuCl-KCl, A., ii, 606.

binary system cuprous bromidepotassium bromide, A., ii, 804.

Cesaris, Pietro de. See also Nicola Parravano.

Cesaro, Giuseppe, artificial production of nesquehonite, A., ii, 209.

Chablay, E., use of liquid ammonia in chemical reactions; alkyloxides, A., i, 939.

Chacón, Aníbal, the cyclic molecule; a new hypothesis on benzene allotropy and polymerism, A., ii, 1080.

Chads, Dudley. See Vincent Edwards. Frederick. See Frederic Challenger, Stanley Kipping and Otto Wallach.

Chambers, Helen, and Sidney Russ, the action of radium emanations on some of the main constituents of normal

blood, A., ii, 809. Chamot, Emile Monnin, David Shepard Pratt, and Harry Westfall Redfield, the phenolsulphonic acid method for the estimation of nitrates in water. III. and IV. The chief sources of error in the method, A., ii, 331.

Chance, Edwin M. See A. G. Blakeley. Chang, Hsing Lang. See Emil Abderhalden.

Chapin, Harold Canning. See Gregory Paul Baxter.

Chapin, William H., and Edgar Fahs Smith, the atomic weight of tantalum, A., ii, 899.

Chapman, David Leonard, and Frank Houghton Gee, the photochemical and thermal interaction of chlorine and carbon monoxide, T., 1726; P., 56,

Chapman, David Leonard, and Herbert Edwin Jones, decomposition of dry ozone, T., 1811; P., 224.

Chapman, H. G. See David Arthur Welsh.

Chapman, James Crosby, homogeneous Röntgen radiation from vapours, A., ii, 357.

Chapman, James Crosby, and E. D. Guest, the intensity of secondary homogeneous Rontgen radiation from compounds, A., ii, 568.

Charaux, Charles, occurrence of fraxin in Diervilla lutea, A., ii, 1023.

Charaux, Charles. See also J. Bougault. Charitschkoff, K. W., a new reaction for ferrous oxide and the separation of iron and aluminium, A., ii, 543.

Charpy, Georges, and S. Bonnerot, the gas contained in steels, A., ii, 609.

cementation of iron by solid carbon, A., ii, 1091.

Charrier, G., and G. Ferreri, action of phosphorus pentachloride on the azoxy-compounds, A., i., 1045.

Chattaway, Frederick Daniel, the transformation of ammonium cyanate into carbamide, P., 280.

the oxidation and auto-reduction of hydrazines, A., i, 494.

Chattaway, Frederick Daniel, and Montague Aldridge, the auto-reduction of

hydrazines, T., 404.

Chattaway, Frederick Daniel, Charles
Linæus Cumming, and Bernard Linæus Cumming, and Bernard Howell Wilsdon, decomposition of hydrazides and hydrazones by heat, T., 1950; P., 193. Chattaway, Frederick Daniel, and Donald

Frederick Sandys Wünsch, polymorphic phthalylhydrazides, T., 2253; P., 193.

Chauchard, A., and (Mlle.) B. Mazoué, action of ultra-violet light on amylase. invertase, and a mixture of these two diastases, A., i, 758.

Chauvenet, Edouard, a general method for the preparation of anhydrous

chlorides, A., ii, 109. dissociation of the compound, ThCl₄, 18NH₃, A., ii, 586.

action of carbonyl chloride on natural and artificial sulphides, A., ii, 602. thorium carbonates, A., ii, 806.

Chavanne, Georges, action of oxidising agents on isopyromucic acid; dialdehydes of dibromomaleic and bromohydroxymaleic acids, A., i, 736.

Chéladzé, (Mlle.) Nina. See Max Wunder. Chemische Fabrik Coswig-Anhalt, preparation of a compound containing aluminium, boric acid, and active oxygen, A., ii, 984.

Chemische Fabrik Gedeon Richter, preparation of additive compounds of chloral with amides, A., i, 836,

Chemische Fabrik Griesheim Elektron, separation of p- and m-nitro-o-anisidine, A., i, 125.

[preparation of dichlorodinitrobenzidine], A., i, 493.

Chemische Fabrik von Friedr. Heyden, preparation of diglycollyldisalicylic acid, A., i, 133.

Chemische Fabrik Ladenburg, preparation of carbonic acid esters, A., i, 438.

Chemische Werke vorm. Dr. Heinrich Byk, preparation of esters of allophanic acid, A., i, 118.

preparation of bromo-fatty acid derivatives of aminoaceto-p-phenetidides, A., i, 323.

Chemische Fabrik vorm. Sandoz, preparation of bromonaphthalene-1diazo-2-oxide-4-sulphonic acid, A., i, 1047.

Chernoff, Lewis H. See Treat Baldwin Johnson.

Chesneau, Gabriel, analysis of monazite sands, A., ii, 935.

Chiari, Richard, changes in physical condition of colloids. XI. Imbibition by gelatin in acids and bases, A., i, 590.

study of autolysis by physico-chemical

methods, A., ii, 307.

Chiari, Richard, and Alfred Fröhlich, changes in the excitability of the vegetative nervous system by removal of calcium, A., ii, 306.

nerve excitability in oxalate poisoning, A., ii, 1018.

Chiari, Richard, and Hans Januschke, inhibition of transudation and exudation by calcium salts, A., ii, 514.

Chick, (Miss) Harriette, and Charles James Martin, heat coagulation of proteins. II. The action of hot water on egg-albumin and the influence of acid and salts on reaction velocity, A., i, 822.

Chieffi, Generoso. See Emanuele Paterno.

Chikashigé, Masumi, metallographic and photochemical studies of the system sulphur—tellurium, A., ii, 978.

Chisolm, Robert Alexander, the respira-tory exchange of mice bearing transplanted carcinoma, A., ii, 211. the size and the growth of the blood in tame rats, A., ii, 1107.

the influence on the blood of the rat of the presence of a transplanted sarcoma, A., ii, 1108.

Chisolm, Robert Alexander. See also Arthur Edwin Boycott.

Chistoni, Alfred, pharmacology of diglycollosalicylic acid, A., ii, 314.

Chlopin, W. G., formation of oxidising agents in air under the influence of ultra-violet light, A., ii, 717.

Choay, Eugene, influence and rôle of fatty matters in the catalytic activity

of hepatic extracts, A., ii, 747. Chou, Tsan Quo, and William Henry Perkin, jun., experiments on the synthesis of the terpenes. Part XVII. $d \cdot \Delta^3$ -p-Menthenol(8) and $d \cdot \Delta^{3;8(9)}$ -pmenthadiene, T., 526; P., 57. Chouchak, D. See Isidore Pouget.

Choudhuri, Kumud Nath. See Haridas Saha.

Christopher, Harold, a simple apparatus for sublimation in a vacuum, P., 236.

Christopher, Harold, and Thomas Percy Hilditch, molecular rotatory power in normal homologous series. Part II. The menthyl esters of the a-bromoaliphatic acids, P., 312.

Christopher, Harold, and Samuel Smiles, the synthesis of derivatives of thioxanthone. Part IV. Synthesis from aromatic sulphinic acids, T., 2046;

P., 265.

Chwala, Augusto, and H. Colle, assay of the higher lead oxides and some new reactions of lead salts, A., ii, 441.

Ciamician, Giacomo Luigi, and Ciro Ravenna, behaviour of benzyl alcohol in plants, A., ii, 643.

genesis of the alkaloids in plants, A., ii, 761.

Ciamician, Giacomo Luigi, and Paul Silber, chemical action of light, A., i, 513, 647, 650.

Ciusa, Roberto, aromatic nitro-derivatives. II., A., i, 931.

Ciusa, Roberto, and Ugo Pestalozza, relations of a-benzaldehydephenylhydrazone to certain nitrogen compounds, A., i, 678.

Roberto,and G. Scagliarini, Ciusa, strychnine and brucine, A., i, 155, 1016.

Ciusa, Roberto, and A. Terni, action of hydroxylamine on ketones of the type R.CH:ČH:CH:COPh, A., i, 918.

Ciusa, Roberto, and L. Vecchio hydrazones, A., i, 810. Civetta, Angelo. See Oreste Prandi. Vecchiotti,

Claassen, H., the solubility of lime in solutions of sucrose, A., i, 606.
Claassen, Oswald, rapid estimation of nitrogen, A., ii, 1027.

Class, Max, ortho-substituted sulphinic acids, A., i, 436.

diazonium sulphinates, A., i, 695. Ludwig, preparation of methylisooxazole from the acetals of tetrolaldehyde, A., i, 491.

Clar, Karl. See Hermann Staudinger. Clark, William Mansfield. See Harmon

Northrop Morse.

Clarke, Charles Hugh, and Francis Ernest Francis, a-amino-a-phenylacetamide and some of its derivatives, T., 319; P., 22.

method for the preparation of derivatives of a-cyanoacrylic acids, A., i,

Clark, Herbert Edmund, and Herbert Lister Bowman, the Dokáchi meteoric

stone, A., ii, 616.

Clarke, Hans Thacher, the relation between residual affinity and chemical constitution. Part II. Certain compounds of nitrogen, T., 1927; P., 243.

arke, Hans Thacher, and Samuel Smiles, synthesis of derivatives of Clarke, Hans thioxanthone. Part III. 1:4-Dihydroxythioxanthone, T., 1533; P., 212.

Clarke, Latham, By-dimethylhexane, A.,

i, 345.

Clarke, Latham, and Gustavus J. Esselen, jun., formation of benzaldehyde and 2:4:6-tribromoaniline from 3:5dibromo-4-aminobenzhydrol by action of bromine, A., i, 725.

Clarke, Latham. See also Charles Loring

Jackson.

Clarke, Robert William, estimation of di-solved oxygen absorbed by sewage effluents containing nitrites and of nitrites in sewage effluents and water, A., ii, 928.

Clarke, (Miss) Rosalind. See Alfred

Senier.

Clarke, S. G. See Frederick Ibbotson. Claude, Georges, luminescent tubes of neon, A., ii, 602.

industrial preparation of pure nitrogen, A., ii, 1084.

volatilisation of electrodes in a tube of

neon, A., ii, 1087.

Clausmann, Paul, estimation of bromine in presence of chlorides and iodides, A., ii, 329.

Clayton, Arthur, notes on new coumarin derivatives, P., 245.

Clayton, Arthur. See also Gilbert Thomas Morgan.

Clayton, Edwy Godwin, the characteristics and chemical composition of some early matches, P., 229.

Clemmensen, Erik, and Arnold H. C. Heitman, methylenedisalicylic acid [methanedisalicylic acid] and its reaction with bromine and iodine, A., i,

Clerici, Enrico, viscosity of the liquids used for the mechanical separation of minerals, A., ii, 257.

Clewer, Hubert William Bentley. See Frank Tutin.

Clo, J. H., effect of temperature on the ionisation of a gas, A., ii, 355.

Cloetta, Max, the behaviour of antimony preparations in the body and the "accustoming" to the same, A., ii, 419.

Clous, William Thomas, action of water containing carbon dioxide on iron, A., ii, 206.

Cobb, John W., the influence of impurities on the corrosion of iron, A., ii, 1092.

Cobb, Philip Howard, addition of hydrogen cyanide to unsaturated compounds, A., i, 640.

Cobb, Philip Howard, and George P. Fuller, further investigation of certain derivatives of o-sulphobenzoic acid, A., i, 637. Cobb, Victor.

See Gregory Paul Baxter. Cockburn, Thomas, and J. W. Black, estimation of quinine as acid citrate in certain organic liquids, A., ii, 944.

Coffignier, Charles, properties of dammar resins, A., i, 550.

Cohen, Ernst [Julius], thermodynamics of normal cells, A., ii, 180.

calculation of electromotive force from

thermal effects, A., ii, 180. Cohen, Ernst, and P. J. H. van Ginneken, zinc amalgams and the Clark element, A., ii, 14.

Cohen, Ernst, Katsuji Inouye, and C. Euwen, piezochemical studies. Influence of pressure on solubility, A., ii, 23.

Cohen, Julius Berend, the relation of position isomerism to optical activity. Part IX. The rotation of the menthyl esters of the isomeric fluoro- and iodobenzoic acids and of the halogen derivatives of the fatty acids, T., 1058; P., 123.

Cohen, Lionel, discrepancy between the results obtained by manuring, etc., in pots and in the field, A., ii, 763.

Cohn, Georg, 8-hydroxyquinoline, A., i,

esters of boric acid, A., i, 640. diguanides, A., i, 928.

Cohn, Robert, plastic calcium fluoride, A., ii, 724.

lecithin, A., ii, 779.

Cohnheim, Otto, and Georg Modrakowski, the action of morphine and opium preparations (pantopon) on the digest-

ive canal, A., ii, 516. Colacicchi, U., action of aldehydes on pyrrole derivatives, A., i, 1030.

Colacicchi, U., action of magnesium phenyl bromide on heptaldehyde, A., i, 199.

action of sulphuryl chloride on sdimethylpyrrole, A., i, 224.

Colacicchi, U. See also Giuseppe Plancher.

Coleschi, Lorenzo, calcium metabolism in lactating women after use of mineral waters containing calcium hydrogen carbonate, A., ii, 507.

Colin, H., and A. Sénéchal, catalytic action of ferric thiocyanate, A., i,

530.

catalytic oxidation of phenols in presence of iron salts, A., ii, 795.

action of acids on the catalytic oxidation of phenols by ferric salts, A., ii,

Colle, H. See Augusto Chwala.

Colson, Albert, Van't Hoff's hypothesis and the dissolved molecule, A., ii, 710.

the theory of solution and heats of dissolution, A., ii, 1066.

the theory of solutions, A., ii, 1071. chromic sulphates and ions, A., ii, 1096.

Colver-Glauert, Edward, and Siegfried Hilpert, the magnetic properties of some nickel steels, A., ii, 1057.

Comanducci, Ezio, thalleioquinine, A., i,

caution as to testing for "saccharin" in sweetened foods and beverages,

A., ii, 80. Combes, Racul, formation of anthocyanic

pigments, A., ii, 1125. Compton, Arthur. See Gabriel Bertrand. Cone, Lee Holt, and C. J. West, condensation of p-dibromobenzene with xanthone; quinocarbonium salts, A., i, 805.

Connolly, E. L. See William Crowell

Contino, A., amount of manganese in some Italian soils, A., ii, 649.

Cook, Alfred Newton, phenyl ether and some of its derivatives, A., i, 284. Cook, C. W. See Frank R. van Horn.

Cook, S. S. See (Hon.) Charles Algernon Parsons.

Cooke, Elizabeth, and Silas Palmer Beebe, autolysis of liver tissue as affected by thyroid administration, A., ii, 415.

Cooke, Hereward L. See Owen Willans Richardson.

Cooke, Robert A., and E. E. Gorslin, estimation of \$\beta\$-hydroxybutyric acid in urine, A., ii, 1140.

Cooke, William Ternent. See Edward Henry Rennie.

Cooper, Evelyn Ashley. See Gilbert Thomas Morgan.

Cooper, Hermon C., T. S. Fuller, and A. A. Klein, artificial crystallisation of barium sulphate, A., ii, 726.

Cooper, William Francis, and Walter $\hat{H}arold$ Nuttall, some reactions of ω bromomethylfurfuraldehyde, T., 1193; P., 134.

Coops, Gerrit H., formulæ of aluminium salts, A., ii, 116.

Copaux, Hippolyte, the constitution of the metatungstates, A., ii, 402.

Coppola, A. See E. Oliveri-Mandalà. Cornec, Eugène, cryoscopy of certain mineral acids and phenols, A.

Cornish, E. C. V., density of soap solu-

tions, A., i, 348. Correal, J. Ubeda y, new leucomaine, A., i, 396.

Corridi, Lamberto, products containing absorbed iodine, A., ii, 1083.

Corridi, Mario. See Pietro Falciola. Costăchescu, N., a secondary heptane in Roumanian petroleum, A., i, 101.

fluorides of cobalt and nickel, A., ii, 729. Costantino, A., the relationship between the higher fatty acids and unsaponifiable substances during different stages in the development of the organism,

A., ii, 627. Coste, Maurice, metallography of the gold-tellurium system, A., ii, 405.

Cotton, A., and Henri Mouton, absolute measurement of magnetic double refraction of nitrobenzene, A., ii, 4.

Cotty, André, specific heat of water, A., ii, 964.

Coupin, Henri, influence of different volatile substances on higher vegetation, ii, 65.

comparative toxicity of essential oils towards higher vegetation, A., ii, 326.

Courtin, L. See A. Astruc.

Courtot, Charles. See Victor Grignard. Couturier, François, catalytic dehydration of sec. - and tert. - pinacolyl alcohols, A., i, 939.

Cow, Douglas, reactions of surviving arteries, A., ii, 413.
Cox, Alvin J., Philippine firewood, A.,

ii, 762.

Craig, Thomas J. I., volumetric estimation of free acid and basic alumina in aluminium salts, A., ii, 335.

Cram, Marshall Perley, and Philip W. Meserve, persistence of strychnine in a corpse, A., ii, 315.

Cramer, Carl. See Richard Willstätter. Cramer, Wilhelm, inactivation of adrenaline in vitro and in vivo, A., ii, 754.

Cramer, Wilhelm. See also R. A. Krause.

Creighton, Henry Jermain Maude. See Alexander Findlay.

Crémieu, Victor. See Jacques Danne.

Crocker, James Codrington, and Frank Matthews, the picraminobenzoic acids and their salts, T., 301; P., 22.

Crommelin, C. A., isotherms of monatomic gases and of their binary mixtures. VI. Co-existing liquid and vapour densities of argon; calculation of the critical density of argon, A., ii, 202.

Crommelin, C. A. See also Heike Ka-

merlingh Onnes.

Crompton, Holland, and (Miss) Maggie Walker, the reduction of acenaphthene, P., 165. nitro-

Cross, Charles Frederick, mercerised cel-

lulose, A , i, 114.

Cross, Charles Frederick, and Edward John Bevan, the interaction of formic acid and cellulose, T., 1450; P., 149. Cross, R. J. See Stewart Woodford Young.

Crossley, Arthur William, and Charles Herbert Hampshire, 6-nitro-3:4:3':4'-tetramethyldiphenyl, T., 721; P., 90.

Crossley, Arthur William, and George Francis Morrell, derivatives of o-xylene. Part II. Dinitro-o-xylidines, T., 2345; P., 307.

Crossley, Arthur William, and (Miss) Nora Renouf, hydroaromatic ketones. Part II. 1:1:2-Trimethylcyclohexan-3-one, T., 1101; P., 137. Crossley, Arthur William, and (Miss)

Gertrude Holland Wren, derivatives of o-xylene. Part I. 3-Nitro-o-xylene and 3:6-dinitro-o-xylene, T., 2341; P., 307.

Crowther, Charles, and Arthur G. Ruston, variation in the composition of cows' milk with advance of lactation,

A., ii, 510.

Croze, F., second spectrum of hydrogen in the extreme red, A., ii, 558.

the negative pole spectrum of oxygen, A., ii, 1041.

Cruickshank, John. See Carl Hamilton Browning.

Crymble, Čecil Reginald, the relation between the absorption spectra of metallic ions and their valency, P., 68, 328.

Crymble, Cecil Reginald, Alfred Walter Stewart, Robert Wright, and William Gerald Glendinning, the influence of conjugated linkings on general absorptive power. Part I. The absorption spectra of some benzene derivatives, T., 451; P., 46.

Crymble, Cecil Reginald, Alfred Walter Stewart, Robert Wright, and (Miss) Florence Williamson Rea, the influence of conjugated linkings on general absorptive power. Part II. Some openchain and cyclic compounds, T., 1262; P., 153.

Cumming, Alexander Charles, efflorescence of washing soda crystals, A., ii, 111.

Cumming, Charles Linæus. See Frederick Daniel Chattaway.

Cummins, S. Lyle, the anti-bactericidal action of the bile salts, A., ii, 1123.

Curie, (Mme.) Marie, the distribution of the intervals of emission of the aparticles of polonium, A., ii, 1047.

the variation of the activity of some radioactive substances with time, A., ii, 1047.

Currie, James N., the optional forms of lactic acid produced by pure cultures of Bacillus bulgaricus, A., ii, 1018.

Curtiss, Richard Sidney, Harry S. Hill, and R. H. Lewis, keto-ester additive products with arylamines and alcohols, A., i, 366.

Curtiss, Richard Sidney, and John A. Kostalek, v-acid esters in the mesoxalic ester synthesis, A., i, 518.

Curtiss, Richard Sidney, and F. Grace C. Spencer, methyl phenyliminomalonate and its reactions, A., i, 540.

Curtiss, Richard Sidney, and Earle K. Stracham, condensations in the mes-

oxalic ester series, A., i, 353. Curtius, Theodor, and Heinrich Gockel, action of hydrazine hydrate on ethyl

bromosuccinate, A., i, 401. Curtius, Theodor, and Ludwig Hussong, action of hydrazine hydrate on ethyl chloroacetate, A., i, 400.

Curtius, Theodor, and Richard Kastner, action of hydrazine hydrate on orthodiketones, A., i, 324.

Curtius, Theodor, and Ernst Welde, 4dibromo-1:2:3-triazol-5-one-1-acetam-

ide, A., i, 167.

Curtman, Louis J., and Edward Frankel, study of the factors influencing the systematic qualitative estimation of barium, A., ii, 659.

Curtman, Louis J., and P. Rothberg, efficiency of borax bead tests for nickel and cobalt, A., ii, 336.

application of the "glow reaction" to the qualitative detection of the platinum metals, A., ii, 661.

Cushing, Harvey. See Emil Goetsch. Cushny, Arthur Robertson, action of Senecio alkaloids and the causation of hepatic cirrhosis in cattle, A., ii, 912.

Cusmano, Guido, action of hydroxylamine on nitrosochlorides and nitroaβ - Amylenehydroxyl -III. amineoxime and derivatives, A., i, 186.

Cusmano, Guido. See also Giuseppe Oddo.

Cuthbertson, Clive, new determinations of some constants of the inert gases, A., ii, 108.

Cuthbertson, Clive, and (Mrs.) Maude Cuthbertson, optical method of measuring vapour pressures: vapour pressure and apparent superheating of solid bromine, A., ii, 582.

Cuthbertson, (Mrs.) Maude. See Clive

Cuthbertson.

Czako, Emerich. See Hermann Staudinger.

Czapski, A. See Heinrich Fresenius. Czarnecki, S. See Ludwik Bruner.

Czernecki, Wincenty, the amount of oxyproteic acids in serous fluids, and in the blood in normal and pathological cases, A., ii, 302.

D.

Daege, H. M. See Wilhelm Steinkopf. Dafert, Franz Wilhelm, and R. Miklauz, some new compounds of nitrogen and hydrogen with lithium. I., A., ii, 39, 393.

Dagéeff, W. F. See Efim Semen London. Daghlian, G. K. See John Livingston $ar{R}utgers$ Morgan.

Dahle, Alfred, new distillation flask, A., ii, 975.

Dahle, Alfred. See also Hermann Matthes.

Daimer, J. See Robert Kremann.

Dakin, Henry Drysdale, chemical nature of alcaptonuria, A., ii, 416. the fate of benzoylacetic acid in the

animal body, A., ii, 419.

Dakin, Henry Drysdale, and Alfred John Wakeman, formic acid as an intermediary substance in the katabolism of fatty acids and other substances, A., ii, 623.

Dakin, Henry Drysdale. See also Alfred John Wakeman.

Dale, Dorothy, and George Ralph Mines, action of acids on skeletal muscle, A., ii, 628.

physiological action of d- and l-tetra-

hydroquinaldine, A., ii, 636.

Dale, Henry Hallett, and Patrick Playfair Laidlaw, physiological action of β-iminoazolylethylamine [4-β-aminoethylglyoxaline], A., ii, 137, 1017.

Dale, Henry Hallett, and Patrick Playfair Laidlaw, a reversed action of the chorda tympani on salivary secretion, A., ii, 997.

Dale, Henry Hallett. See also George Barger.

Dam, W. van, combination of lactic acid and casein, A., i, 91.

swelling of casein under the influence of sodium chloride and lactic acid, A., i, 407.

Danckwortt, Peter Walter, belladonna and henbane extracts, A., ii, 644.

Dané, Aristide, easy method for detecting nitrites, A., ii, 34.

Danesi, L., and M. Topi, disinfection of

plants, A., ii, 820.

Dangeard, P. A., action of light on chlorophyll, A., ii, 86.

Daniel, Kenneth C. R., and Maximilian Nierenstein, the utilisation of carbalkyloxy-derivatives for the estimation of hydroxyl groups, A., i, 371.

Daniel Brunet, A., and C. Rolland, chemical and physiological examination of the liver of oxen, A., ii, 1111.

Danne, Jacques, and Victor Crémieu, quantity of radium emanation liberated from one of the springs at Columbièressur-Orb (Hérault), A., ii, 1049.

Danne, Jacques. See also Haret. Dannehl, Hugo. See Karl Auwers. Dantony, E. See V. Vermorel.

Danysz, J., the β-rays of the radium family, A., ii, 840.
 Darmois, Eugène, natural and magnetic

rotatory polarisation, A., ii, 352.

Darzens, Georges, new method for preparation of glycidic esters, A., i, 6. condensation of halogen compounds with ethyl \$\beta\beta\beta\text{dimethylglycidate,} \\ A., i, 259.

new method for esterification of alco-

hols, A., i, 513. action of thionyl chloride in presence of a tertiary base on esters of hydroxy-acids, A., i, 517.

Darzens, Georges, and François Bourion, action of thionyl chloride on metallic oxides, A., ii, 878.

Darzens, Georges, and H. Rost, derivatives of butylcyclohexane, A., i, 290.

synthesis of new hydroaromatic ketones, A., i, 988.

Darzens, Georges, and J. Sejourné, condensation of ethyl ββ-dimethylglycidate with ethyl bromoacetate, A., i, 420.

Datta, Rasik Lal, the formation of dichlorocarbamide and its behaviour towards amines, P., 264.

Datta, Rasik Lal. See also Prafulla Chandra Rây.

Daudt, Herbert Wilkens. See Gregory Paul Baxter.

David, W. T., radiations in explosions of coal gas and air, A., ii, 1046.

Davidsohn, Heinrich. See Leonor Michaelis.

Davies, Harold, and Frederick Stanley Kipping, different methods of applying the Grignard reagents, T., 296; P., 39. D'Avis, C. See Robert Pschorr.

Dawson, Harry Medforth, the activity of acids as catalysts in relation to the nature of the solvent medium, T., 1.

Dawson, Harry Medforth, and Harry Ark, the reactivity of ketones towards iodine and the relative rates of tautomeric change. Part II., T., 1740; P., 223.

Dawson, Harry Medforth, and (Miss) May Sybil Leslie, ionisation in non-aqueous solvents, T., 1601; P., 208.

Day, Arthur Louis, and Robert B. Sosman, the melting points of minerals, A., ii, 496.

Deakin, (Miss) Stella, and Albert Cherbury David Rivett, conductivity and dissociation of diacetyltartaric acid, P., 316.

Debourdeaux, Léon, estimation of morphine in opium and in opium preparations, A., ii, 345.

Debye, Peter, calculation of molecular dimensions from radiometer observations, A., ii, 34.

Dechend, Hermann von, and W. Hammer, specific chemical actions of the canal rays of different elements, A., ii,

Decker, Claus. See Richard Stoermer. Decker, Herman, preparation of hydrastinine salts, A., i, 906.

Decker, Herman, and Paul Becker, condensation of a substituted formamide to a derivative of aminomalonamide, A., i, 714.

Decker, Herman, and Adolf Kaufmann,

cyclic ammonium bases, A., i, 807. ocker, Herman, Adolf Kaufmann, Decker, Alberto Albertini, S. Pfeifer, N. Prohatzka, Matei Sassu, and Waslaw Wisloki, cyclic ammonium bases,

A., i, 1023.

Dede, L., effect of sucrose on the accuracy of the copper voltameter, A., ii, 461.

arrangement for collecting the condensed water from the outside of reflux condensers, A., ii, 714.

gravimetric estimation of nickel and cobalt, A., ii, 1034.

Degrazia, Josef von, polarimetric estimation of nicotine in tobacco extract, A., ii, 671.

estimation of nicotine in tobacco, A., ii, 672.

Dehn, William Maurice, action of diiodoacetylene on organic bases, A., i,

Dehn, William Maurice, and Albert H. Dewey, action of carbon tetrabromide on organic bases, A., i, 914.

Deiss, Eugen, and Hans Leysaht, the separation of iron and varadium by the ether method, A., ii, 939.

Dekhuyzen, M. C., specific gravity of ammonium sulphate solutions, A., ii, 603. Delachanal, B. See G. Guillemin.

Delacre, Maurice, gradual synthesis of the benzene chain, A., i, 32.

[pinacolin derivatives] corrections, A., i, 102.

quantitative dehydration of pure pinacone, A., i, 347.

accessory products in the hydrolysis of (I.) crude pinacone; (II.) pure pinacone, A., i, 939.

Delbridge, Thomas G. See William Ridgely Orndorff.

Delépine, [Stéphane] Marcel, nitrogen and sulphur derivatives of carbon disulphide. XVII. Tetraalkylthiocarbamides and tetra-alkyl-isothiocarbamides, A., i, 23.

action of pyridine on iridiodisulphates,

pyridinoiridopentachlorides, A., i, 565. pyridinoiridipentachlorides, A., i, 565. sulpho-ethereal salts or thionic esters,

R. CS. OR', A., i, 768.

nitrogen and sulphur derivatives of carbon disulphide. XVIII. Chloro-

thiocarbonates, A., i, 944. some supposed iridium chlorides; condensed chlorides, A., ii, 806. volatility of sulphur compounds, A.,

ii, 1061. Delépine, Marcel, and René Sornet, separation and estimation of ammonia

and of pyridine, A., ii, 827. **Delépine**, Sheridan, chemical disinfect-

ants, A., ii, 62. **Dember**, Harry, the influence of radium rays on the photo-electric sensitiveness

of metals, A., ii, 567. Deming, Horace G., new solvents for cellulose and their action on this substance, A., i, 771.

Demjanoff, Nicolaus J., and M. N. Dojarenko, two methods of obtaining cyclobutanol; certain transformations of cyclobutanol accompanied by iso-

merisation, A., i, 778.

Denham, Henry George, the action of alkyl iodides on copper oxide, A., ii, 804

Deniges, Georges, preparation of ψ morphine by mineral catalysis, A., i, 397.

new reactions of morphine, A., ii, 79.

new reaction of cupreine, A., ii, 162. characteristic reaction of bromine, A., ii, 652.

detection of nitrates and nitrites in water by means of reduced strychnine, A., ii, 655.

theory and modification of the Malaquin test for strychnine, A., ii,

Denis, W., oxidation of the amino-acids. I. Glycine and cystine, A., i, 616. oxidation of the amino-acids. Alanine and tyrosine, A., i, 773.

estimation of total sulphur in urine,

A., ii, 66.

estimation of the amide nitrogen in proteins, A., ii, 163.

iodine in the human pituitary, A., ii, 746.

Denis, W. See also Otto Folin.

Denison, Robert Beckett. See John Gibson.

Dennstedt, Max [Eugen Hermann], recent advances in forensic chemistry, A., ii,

Derick, C. G., polarity of elements and radicles measured in terms of a logarithmic function of the ionisation constant, A., ii, 712.

application of polarity measured in terms of a logarithmic function of the ionisation constant. I. The use of polarity in the explanation of the reactions of aldehydes and ketones, A., ii, 712. application of polarity measured in

terms of a logarithmic function of the ionisation constant. II. Scale of combined influence of substitution in organic compounds, A., ii, 713.

application of polarity measured in terms of a logarithmic function of the ionisation constant. III. Correlation of chemical structure with ionisation, A., ii, 713.

Desch, Cecil Henry, the composition of eutectic mixtures, A., ii, 381.

Desgrez, Alexandre, toxicity of two new nitriles and the antitoxic action of sodium thiosulphate towards one of

them, A., ii, 756. influence of chemical constitution on the toxicity of nitriles and amides, A., ii, 1119.

Desmoulière, Em., estimation of citric acid in milk, A., ii, 548.

Detœuf, A. See Auguste Béhal.

Deussen, Ernst, humulene of oil of hop flowers, A., i, 549.

Deutsch, H. See Julius von Braun.

Deventer, Charles Marius van, selfinduction with the semi-insulator in relation to concentration cells, A., ii,

Dewey, Albert H. See William Maurice Dehn.

Dey, Biman Behary, and Hemandra Kumar Sen, the action of hydrazine sulphate on nitrites and a new method of estimating nitrogen in nitrites, A., ii, 822.

Dezani, Serafino, the chromogenic substances of white grapes, A., ii, 223. antipepsin. I., A., ii, 621. action of gypsum on nitrification,

A., ii, 1019.

Diamare, Vincenzo, the dextrose of the egg and its biological significance, A., ii, 129.

biology of the egg, a chemico-anatomical co-ordination, A., ii, 1110.

pancreatic diabetes in cold-blooded animals, A., ii, 1117.

Dickhäuser, F. See Robert Pschorr.

Dieckmann, Theodor. See Siegfried

FriedrichHilpert andWilly Hinrichsen. Dieckmann, Walter, isomerism and

desmotropism with ethyl 2:6-diphenylcyclohexen-4-one-1-carboxylate, A., i, 450.

acvlation of oxalylbenzyl cyanide [oxalylphenylacetonitrile] and oxalylethylene cyanide [oxalylsuccinonitrile], A., i, 456. kmann, Walter, and Karl von

Dieckmann, Fischer, 1:5-diketones, A., i, 451. Diefenthäler, Otto. See Erich Müller.

Diehm, Franz. See Erich Beschke.

Diels, Otto, and Erich Andersonn, benzylidenediacetyl, A., i, 464.

Diels, Otto, and Paul Blumberg, pre-

paration of cholesteryl ethers, A.,i, 971. Diels, Otto, and Paul Fritsche, ethyl

azodica: boxylate. A., i, 957. Diels, Otto, and Richard Gollmann,

acylation and alkylation of cyanamide, A., i, 955.

Diels, Otto, and Armenak Gukassianz, chloralurethane. II., A., i, 24.

Diels, Otto, and Jacob Martin Johlin, new method for the preparation of ketone-alcohols, A., i, 254.

Diels, Otto, and Anton Kollisch, diacetyl; diacetylmonophenylhydrazones their condensations, A., i, 230.

Dienes, Ludwig, the internal frictions of colloidal and non-colloidal liquids, A., ii, 590.

do the individual red-blood corpuscles of a suspension of the same show measurable individual differences? A., ii, 740.

Diepolder, Emil, derivatives of 1:2-dimethylbenzene [o-xylene]. II., A., i, 853.

sublimation apparatus, A., ii, 96.

Diesel, W., isomorphous mixtures of anhydrous calcium, magnesium and iron carbonates, A., ii, 725.

Dieterle, Hedwig. See Hugo Bauer. Dietze, \hat{F} ., assay of sweet spirits of nitre,

A., ii, 662.

Dimroth, Otto, and Heinrich Schneider, intramolecular transformations. Influence of the solvent on the velocity of reaction and the equilibrium, A., ii, 31.

Dinslage, E., analysis of lime saltpetre, "kalkstickstoff," and "stickstoff-

kalk," A., ii, 1027.

Dinwiddie, J. G., and Joseph Hoeing Kastle, bromination of phenol, A., i,

Dischendorfer. See Robert Kremann. Dittler, Emil, thermochemistry of the

silicates, A., ii, 96. itto, R. C. Se See Owen Ditto. WillansRichardson.

Dittrich, [George Paul] Max, estimation of ferrous iron in silicates according to the Pebal-Dölter method, A., ii, 543.

estimation of organic matters in waters from sulphur springs, A., ii,

Divers, Edward, a modification of Raschig's theory of the lead-chamber process, A., ii, 596.

Dixon, Harold Baily, presidential address, T., 588.

Berthelot memorial lecture, T., 2253. Dixon, Henry H., thermoelectric method of cryoscopy, A., ii, 853.

Walter Ernest, and William Dobinson Halliburton, the action of drugs on the cerebral vessels, A., ii, 52.

Dimitrieff, S. A. See Wassili W. Scharwin.

Dobbie, James Johnston, and John Jacob Fox, the absorption spectra of quinine, cupreine, 6-methoxyquinoline and 6hydroxyquinoline, P., 325.

Dobbie, James Johnston, John Jacob Fox, and Arthur Josiah Hoffmeister Gauge, diphenylene: a new aromatic hydrocarbon. Part I., T., 683; P., 90.

Dobbie, James Johnston, John Jacob Fox, and Arthur Josiah Hoffmeister Gauge, 2:2'-dibromodiphenyl and 2:2'-dichlorodiphenyl, T., 1615; P., 217.

Dobbie, James Johnston, and Alexander Lauder, hydroxycodeine: a new alkaloid from opium, T., 34.

the absorption spectra of cinchonine, quinine and their isomerides, T., 1254; P., 148.

Dobroserdoff, Dimitri K., dielectric constants of organic compounds in relation to their composition and structure. I., II., III., and IV., A., ii, 458.

Dobrowolskaja, N. A., the influence of the loss of blood on digestive processes, A., ii, 620.

Dobson, (Miss) Bessie, and William Henry Perkin, jun., the identity of xanthaline and papaveraldine, T., 135;

Doby, G., the general application of the Geryk air pump to vacuum distilla-

tions, A., ii, 714.

Dodgson, John Wallis, the stability of the double oxalates of sodium, and nickel and sodium and cobalt, P., 260.

Döblin, A. See Peter Rona.

Doelter [y Cisterich], Cornelio [August], the amorphous and crystalline states, A., ii, 376.

the action of cathode rays on certain minerals, and the nature of the mineral colorations, A., ii, 569.

the electrical conductivity and be-haviour of diamond at high temperatures, A., ii, 601.

Doelter, Cornelio, and Heinrich Sirk, the different influences of α-, β-, and γ-rays on the colours of solid sub-

stances, A., ii, 171. determination of the absolute value of the viscosity of molten silicates, A., ii, 880.

Doepmann, Felix. See August Michaelis. Doerinckel, Friedrich, the system manganous oxide—silica, A., ii, 608.

Doescher, Hans. See Josef Houben.

Dojarenko, A. G., oxidation of humic acid, A., i, 357.

See Nicolaus J. Dojarenko, M. N.Demjanoff.

See Rudolf Weiss-Dombrowsky, A. gerber.

Dominicis, Angelo de, direct demonstration of carbon monoxide in the tissues at a time long subsequent to death, A., ii. 439.

Dominikiewicz, M., measuring flask for estimating the iodine number, A., ii, 447.

Donaldson, H., spectra of the electrodeless ring discharge in certain gases, A., ii, 1042.

Donath, Eduard, properties of potassium nitrite, A., ii, 799.

the rusting of iron in reinforced concrete, A., ii, 897.

Donath, Eduard, and A. Indra, iron rust, A., ii, 805.

Donau, Julius, a micro-filter for the treatment of small quantities of precipitate, A., ii, 225.

Donnan, Frederick George, equilibria and potentials at membranes in the presence of non-dialysing electrolytes, A., ii, 848.

Donnan, Frederick George, and Arthur John Allmand, a standard electrode with alkaline electrolyte: Hg | HgO

alkali, T., 845; P., 70.

Donnan, Frederick George, and Albert Buckley Harris, the osmotic pressure and conductivity of aqueous solutions of Congo-red, and reversible membrane equilibria, T., 1554; P., 209.

Donnan, Frederick George, and John Smeath Thomas, the solubility of cuprous oxide in aqueous ammonia solutions, and the composition of the cuprous-ammonia complex, T., 1788; P., 213.

Donnan, Frederick George, and Albert Simpson White, the system: palmitic acid-sodium palmitate, T., 1668; P.,

Doree, Charles, and Frederick Lucien Golla, trimethylamine as a normal constituent of human blood, urine, and cerebro-spinal fluid, A., ii, 212.

Dormane, Jean, estimation of phosphorus in wine, A., ii, 931.

Doroschewsky, Antony G., certain properties of aqueous solutions of trimethylcarbinol, A., i, 414.

recipiocal action of associated liquids, A., ii, 468.

relation of vapour pressure to specific gravity in binary liquid mixtures, A., ii, 698.

partial pressures of water and alcohols in aqueous alcohols. V., A., ii, 1062.

Doroschewsky, Antony G., and E. V. Poljansky, boiling points of aqueous solutions of isopropyl alcohol and of trimethylcarbinol, A., i, 253.

Dorp, Gerard Carel Adriaan van, equilibria in the system sulphuric acid, ammonia, and water at 30°, A., ii, 379.

Dorronsoro, Bernabé, essential oil of Spanish wild marjoram, A., i, 74. C. 11.

Dorssen, S. van, nitro- and amino-sulphobenzoic acids, A., i, 29.

Douetteau, Réne, 2:3- and 3:4-dihydroxybenzylamines, A., i, 973.

Douglas, Claude Gordon, estimation of total respiratory exchange in man, A., ii, 653.

Douglas, Claude Gordon, and John Scott Haldane, the causes of absorption of oxygen by the lungs in man, A., ii,

Douris, Roger, hydrogenation of crotonaldehyde in presence of nickel, A., i,

Dover, (Miss) Mary Violet, time curves for cadmium deposited from organic electrolytes, A., ii, 1033.

Dowgelewitsch, N. See Wladimir N. Ipatieff.

Dox, Arthur Wayland, occurrence of tyrosine crystals in Roquefort cheese, A., ii, 429.

phosphorus assimilation of Aspergillus niger, A., ii, 914.

Dox, Arthur Wayland, and Ross Golden, phytase in lower fungi, A., ii, 1022.

Dox, Arthur Wayland, and Ray E. Neidig, pentosans in lower fungi, A., ii, 644.

Doxiades, Leonidas, the maltase of blood-serum and liver, A., ii, 619. Doyon, Maurice, Albert Morel, and A.

Policard, isolation of an hepatic antithrombin; description of some

of its properties, A., ii, 216. demonstration of the exclusively hepatic origin of antithrombin; extraction of this substance by a solvent for nuclear substances, A., ii, 216.

passage of the nucleo-protein anticoagulase of the liver into the blood; comparative action of atropine according to the manner of introduction, A., ii, 409.

Drachussoff. See Wladimir Ipatieff. Drapier, Paul, the viscosity of binary liquid mixtures in the neighbourhood of the critical dissolution temperature, A., ii, 968.

Drauzburg, W. See Hermann Thoms. Dreaper, William Porter, theory of dyeing: the colour and molecular state of pieric acid, T., 2094; P., 244.

Drennan, Fred M., the presence in the blood of the pancreatic internal secretion, A., ii, 995.

Drennan, Fred M. See also Anton Julius Carlson.

Driot, mercuric oxychlorides, A., ii,

79

Drucker, Karl, dissociation of sulphuric acid and the mobility of the hydrogen sulphate ion, A., ii, 687.

specific heat of gases, A., ii, 792. Drucker, Karl, and R. Kassel, fluidity

of binary mixtures, A., ii, 373.

Drucker, Karl, and E. Moles, solubility of gases in aqueous solutions of glycerol and of isobutyric acid, A., ii, 23.

Drushel, William Allen, and George Augustus Linhart, hydrolysis of metallic alkyl sulphates, A., ii, 707.

Duane, William, the heat generated by radioactive substances, A., ii, 358. the mass of gaseous ions, A., ii, 839.

Du Bois, Henri E. J. G., and G. J. Elias, influence of temperature and magnetisation on selective absorption and fluorescence spectra. II., A., ii, 832.

Du Bois-Reymond, R., the mechanism of the gaseous exchange in the lungs,

A., ii, 503.

Duboux, Marcel, physico-chemical estimation of calcium in wine, A., ii, 228. Dubsky, J. V. See Antoine Paul Nico-

las Franchimont.

Duclaux, Jacques, application of the kinetic theory to the study of catalytic phenomena, A., ii, 479. constitution of water, A., ii, 595.

Duclaux, Jacques, and (Mme.) E. Wollman, osmotic pressure of colloids, A., 1i, 588.

Dürrfeld, V., red glauberite and polyhalite from Varangéville, near Nancy, A., ii, 295.

Dürrschnabel, Karl. See Hugo Weil.

Duffield, W. Geoffrey, the effect of pressure on arc spectra; (3) silver: λ 4000 to λ 4600; (4) gold, A., ii,

Duffour, Alexis, new complex iridium derivatives: iridotetrachloro-oxalates and iridotetrachlorides, A., i,

new types of irido-oxalic acids and irido-oxalates, A., i, 519.

Duhem, Pierre, colloids and permanent chemical modifications, A., ii, 377.

Dumanski, A. V., colloidal ferric hydroxide, A., ii, 610.

Dumesnil, *Ernest*, preparation of arsenic amalgam, A., i1, 403.

Dumesnil, P., preparation of asymmetric benzyldialkylacetic acids, A., i, 718.

Duncker, F., and Alb. Jodlbauer, the influence of poisons on the catalase and the so-called ψ -peroxydase content of the blood, A., 11, 756.

Dunin-Borkowski, J., the absorption of hæmolytic and agglutinating substances, A., ii, 212.

Dunlap, F. L., and L. O. Gilbert, synthesis of fats by the action of enzymes, A., i, 1054.

Dunn, Frederick Percy, the diphenylcarbamyloximes, preliminary note, P.,

Dunn, John Shaw, the oxydase reaction in myeloid tissues, A., ii, 58.

Dunoyer, Louis, fluorescence of the vapours of the alkali metals, A., ii, 832.

Dunstan, Albert Ernest, and Albert George Mussell, the application of viscometry to the measurement of the rate of reaction, T., 565; P., 59.

Dunstan, Albert Ernest, and Ferdinand Bernard Thole, note on the preparation of the syn-aldoximes, P., 233.

Dunstan, Albert Ernest. See also Thomas Percy Hilditch.

Dunstan, Wyndham Rowland, and John Robertshaw Hill, the aerial oxidation (rusting) of metals, T., 1835; P., 221.

the passivity of iron and certain other metals, T., 1853; P., 222.

Duparc, Louis, the platiniferous deposits of the Urals, A., ii, 733.

Duparc, Louis, and Max Wunder, serpentines of Krebet-Salatim (North Urals), A., ii, 405.

Duparc, Louis, Max Wunder, and R. Sabot, beryl and rhodizite from the pegmatites of Madagascar, A., ii,

Duperthuis, H., and E. Philippe, estimation of alcohol in wine by means of the critical temperature, A., ii, 662. Duperthuis, H. See also E. Philippe.

Dupont, Georges, acetylenic pinacone [βε-dimethyl-Δγ-hexinene-βε-diol], A., i, 173.

catalytic isomerisation of acetylenic pinacone [βε-dimethyl-Δγ-hexineneβε-diol]; synthesis of 3-keto-2:2:5:-5-tetramethyltetrahydrofuran,

catalytic preparation of substituted ketohydrofurans, A., i, 804.

Dupont, Georges. See also Wladimir F. Luginin.

See Roure-Bertrand Fils. Dupont, J. Dupuy, Eugène L. See Pierre Jolibois. Durham, T. C. See Eugene C. Bingham.

Duryea, Chester B., acid hydrolysis of

starch granules, A., i, 711.

Duschsky, J. E., behaviour of sucrose, and its decomposition products on heating, A., i, 607, 769.

Dushman, Saul, the behaviour of copper

anodes in chloride solutions, A., ii, 181.

Dutoit, Paul, and Gottfried von Weisse, physico-chemical volumetric analysis. III. Precipitation followed by alteration in potential, A., ii, 1129. physico-chemical volumetric analysis. V. Estimation and separation of the halogens, A., ii, 1130.

physico-chemical volumetric analysis. IV. Estimation of copper and silver, A., ii, 1137.

Dutt, N. N. See Alan C. W. Menzies. Dutta, Jatindra M. See Edwin Roy Watson.

Duval, Henri, molecular refraction of azo-compounds, A., ii, 1041.

Dyson, William, cutaneous pigmentation in normal and pathological conditions, A., ii, 307.

Dzierzbicki, J. de. See Joseph de Kowalski.

E.

Eakle, Arthur S., neocolemanite, a variety of colemanite, and howlite from California, A., ii, 901.
 Earl, John Campbell, specific gravities

Earl, John Campbell, specific gravities at the melting point in relation to constitution. A ii 17

constitution, A., ii, 17.

Easterfield, Thomas Hill, and (Miss)
Clara Millicent Taylor, the preparation of the ketones of the higher fatty
acids, T., 2298; P., 279.

Ebert, Erich. See Hans Stobbe.

Ebert, Georg, behaviour of lead chloride from pitchblende towards magnesium phenyl bromide, A., ii, 244.

Ebler, Erich, treatment of insoluble residues, A., ii, 932.

separation scheme without the use of hydrogen sulphide, A., ii, 932.

Ebler, Erich, and M. Fellner, preparation of colloidal silica acid, A., ii, 723. the concentration and isolation of radioactive substances by "frac-

tional adsorption," A.. ii, 957. the radioactivity of mineral springs,

the radioactivity of mineral springs, A., ii, 1049. Ebler, Erich, and R. L. Krause, zinc

peroxite (zinc moloxide, zinc peroxydate), ZnO₂, ½H₂O, and a general method of preparing peroxites, A., ii, 801.

Eck, J. J. van, effect of heat on the peroxydase in cow's milk, A., ii, 1144. Eck, P. N. van, triboluminescence, A., ii, 563.

Eckert, Alfred. See Hans Meyer. Eckert, Richard. See Hans Stobbe.

Edelstein, F., and Ernst Welde, estimation of volatile fatty acids [in fæces], A., ii, 827.

Edlbacher, Siegfried. See Roland Scholl. Edgar, Arthur. See Gilbert Newton Lewis.

Edgar, Graham, precipitation of vanadic acid as silver vanadate and estimation of phosphoric and vanadic acids in the presence of one another, A., ii, 71.

Edie, Edward S., Benjamin Moore, and Herbert Eldon Roaf, studies on gly-

cosuria, A., ii, 311.

Edwards, (Miss) Muriel Gwendolen, and Kennedy Joseph Previté Orton, the detection and estimation of small quantities of acetic anhydride in acetic acid, T., 1181; P., 121.

Edwards, (Miss) Muriel Gwendolen. See also Kennedy Joseph Previté Orton.

Edwards, Vincent, and Dudley Chads, Kjeldahl's process, A., ii, 437. Effront, Jean, action of the Bulgarian

Effront, Jean, action of the Bulgarian ferment on proteins and aminocompounds, A., ii, 61.

the Bulgarian ferment, A., ii, 319. estimation of the volatile fatty acids, A., ii, 547.

Egerton, Alfred Charles Glyn, an addition to the Buchner funnel, P., 189.

Egger, F., See Hartwig Franzen.

Egmond, A. A. J. van, the action of morphine on the heart, A., ii, 755.

Egoroff, I. V., oxide from decamethyleneglycol, A., i, 253.
Egorova, (Mlle.) V. I., isomerisation of

Egorova, (Mlle.) V. I., isomerisation of unsaturated cyclic hydrocarbons, C_8H_{12} , A., i, 959.

Ehrenberg, Paul, plasticity, especially of barium sulphate, A., ii, 972.

Ehrhart, Oskar. See Karl Andreas Hofmann.

Ehrlich, Curt, preparation of carvacrolphthalein, A., i, 130.

Ehrlich, Felix, fermentation of tyrosine to p-hydroxyphenylethanol (tyrosol), A., i, 127.

the formation of plasma protein by yeasts and moulds, A., ii, 1122.

Ehrlich, Felix, and K. A. Jacobsen, the transformation of amino-acids into hydroxy-acids by moulds, A., ii, 520.

Ehrlich, Paul, Alfred Bertheim, and Ernst Schmitz, reduction products of arsanilic acid and its derivatives. II. pp'-Diaminoarsenobenzene, A., i, 593.

Ehrmann, Ed., new mordant dyes derived from gallic acid, A., i, 459.

Ehrwein, R. See Timothée Klobb.

Eichengrün, Arthur, cellulose acetate, A., i, 712.

Einhorn, Alfred, preparation of alkyloxyacetyl derivatives of menthols, A., i, 137.

Einhorn, Alfred, Alexander von Bagh, Gustav Haas, Carl Ladisch, and Leo Rothlauf, acylated salicylosalicylic [o-2-acyloxybenzoyloxybenzoic] acids, A., i, 301

Einhorn, Alfred, and Leo Rothlauf, effect of heating mixed esters of carbonic acid, A., i, 703.

Einhorn, Alfred, and Rudolf Seuffert, esters of p-aminobenzoic acid, A., i,

acylated salicylic acid anhydrides, A.,

Einstein, Albert, connexion between the elastic properties and the specific heat of solid substances consisting of monatomic molecules, A., ii, 186.

Eisenlohr, Fritz, recalculation of atomic refractions, A., ii, 81.

Eisenlohr, Fritz. See also Karl Auwers. Eisenreich, Kurt, and Fritz Foerster, employment of silver fluoride solutions in the silver coulometer, A., ii, 461.

Elbs, Karl, Fr. Mette, A. Schuster, and K. Sinner, lactyl compounds of primary aromatic amines, A., i, 191.

Elias, G. J., refraction and magnetic double refraction of solutions of the rare earths, A., ii, 81.

anomalous magnetic rotation dispersion and selective absorption, A.,

ii, 679. Elias, G. J. See also Henri E. J. G. Du Bois.

Eller, Wilhelm. See Bruno Emmert. Ellinger, Alexander, andFlamand, tri-indylmethane dyes, A., i, 329.

Ellinger, Alexander, \mathbf{and} YashiroKotake, the partition of bromine in the organism after the administration of inorganic and organic bromine preparations, A., ii, 509.

Elliot, T. Gifford, the volumetric estimation of sulphur in iron and

steel, A., ii, 1131.

Ellis, Henry Russell. See Frank Edwin

Ellison, F. O'B., the relation between the physical, chemical, and electrical properties of nerves. V. The action of cinchonamine hydrochloride on frog's nerves, A., ii, 905.

Elvove, Elias, use of sulphur dioxide in checking strengths of volumetric solutions of iodine, alkali, and silver, A., ii, 148. estimation of lactic acid, A., ii,

160.

Elvove, Elias. See also Joseph Hoeing Kastle.

Embden, Gustav, and Ernst Schmitz, the synthetic formation of aminoacids in the liver, A., ii, 53.

Emde, Hermann, the relation between chemical constitution and physiological action; substances with unstable carbon-nitrogen linking, A., ii, 313.

the estimation of halogens according to the method of Baubigny and Chavanne, A., ii, 532.

estimation of cantharidin in cantharides and its tincture, A., ii, 669.

Emde, Hermann, and Ernst Runne, doubly linked carbon atoms and the carbon-nitrogen linking. VIII. Reduction of N-alkylated aminoketones, A., i, 714.

doubly linked carbon atoms and the carbon-nitrogen linking. IX. Arylamino-alcohols, A., i, 718.

Emde, Hermann, and Hans Schellbach, doubly linked carbon atoms and the carbon-nitrogen linking. V. Fission of quaternary ammonium salts by nascent hydrogen. VI. Formation of mixed tertiary amines. VII. Relative mobility of allyl-, benzyl-, and cinnamyl-, in the tission of quaternary ammonium salts by reduction, A., i, 281. tetracinnamyl- and tetrabenzyl-am-

monium, A., i, 282.

Emerson, Benjamin Kendall, chemica: study of the periodic relations of the elements and their graphic representation, A., ii, 198.

Emery, Albert G., and Francis Gano Benedict, heat of combustion of compounds of physiological importance,

A., ii, 857.

Emmerich, Rudolf, W. Graf zu Leiningen, and Oskar Leew, injurious bacterial activity in soils, A., ii,

Emmert, Bruno, and Wilhelm Eller, organo-metallic ester compounds. Iodo-tin-ester compounds, A., i, 846.

Emmert, Bruno. See also Julius Tafel. Emmes, L. E., and J. A. Riche, the respiratory exchange as affected by body position, A., ii, 210.

Emmes, L. E. See also Francis Gano Benedict.

Emmett, A. D., and E. C. Carroll, protein as a factor in the nutrition of animals. I. A study of the physical constants of fats from swine, A., ii, 411.

Emmett, William Gidley, and Humphrey Owen Jones, isomeric monothiophosphates, T., 713; P., 72.

Emslander, Fritz, what is the cause of the separation of albumin in bottled beer which has been subjected to normal treatment in brewery and cellar? A., i, 935.

Endell, K. See Reinhold Rieke.
Engel, St., and A. Bode, colostral fat, A., ii, 1010.

Engel, St., and Hans Murschhauser, the composition of human milk in nephritis, A., ii, 813.

the influence of urea on the blood and milk of suckling women, A., ii, 815. Engel, St. See also Julius Bauer.

Engeland, R., and Friedrich Kutscher, a second active ergot base, A., ii,

some constituents of extractum Secalis cornuti, A., ii, 528.

Engeland, R. See also Dankwart Ackermann.

Engelhardt, Alfred.See WilhelmTraube.

Engelhardt, K. von. See Heinrich Ley. Engemann, Karl, the exfoliation of electrolytic nickel, A., ii, 1094.

Enger, Frederic. See Francis J. Seiter. Enklaar, Johannes Eliza, dissociation constants of oxalic acid, A., i, 419. neutralisation curve of oxalic acid, A., i, 602.

dissociation constant K_2 of sulphuric acid and oxalic acid, A., ii, 1071.

Enz, H., detection of thujone (tanacetone) in absinthe, A., ii, 1040.

Ephraim. Fritz, attempts to prepare optically active phosphorus

pounds, A., i, 284.

Ephraim, Fritz, and Eduard Lasocki, nitrosulphamide and sulphohydrazide, A., ii, 276.

Ephraim, Fritz, and Henryk Piotrowski, the action of sulphur dioxide on ammonia, A., ii, 274.

action of sulphur and of compounds containing sulphur on hydrazine, A., ii, 275.

Eppinger, Paul. See Oskar Piloty. Erben, B., Fr. Prachfeld, and W. Vilikovsky, employment of nitrogenous manures for sugar beet, A., ii, 65.

Erdelyi, Alexander. See Frank Tangl. Erdmann, C. C., estimation of alkylamines obtained from urine after Kjeldahl digestion, A., ii, 551.

Erdmann, Ernst, preparation of tri-iododerivatives of stearic acid, A., i, 601.

preparation and properties of α-linolenic acid from linseed oil, A., i, 832.

Erdmann, Ernst. See also Edmund Oskar von Lippmann.

Eriksson, Anselm, the inhibition of the action of invertase, A., i, 698.

Eriksson, Ella, estimation of glycyrrhizin and sugars in liquorice root and extract, A., ii, 346.

Erlenmeyer, Emil, labile isomerides of the same structure, which can be converted one into another, A., i,

theoretical considerations on the isomerism in ethylene derivatives, A., i, 780.

the isomeric acids of the cinnamic acid series, A., i, 782.

Erlenmeyer, Emil, and G. Hilgendorff, the possibility of the existence of molecular asymmetric storax-cinnamic acids, A., i, 781.

the behaviour of certain mixtures of storax-cinnamic acid with certain substituted cinnamic acids, A., i, 782.

further experiments on the separation of heterocinnamic acid, A., i, 783.

Erlenmeyer, Emil, G. Hilgendorff, and Th. Marx, separation and transformation of the benzaldehydes, A., i, 784.

Erlwein, Georg, C. Warth, and Reinhard Beutner, decomposition of calcium

carbide by heat, A., ii, 396.

Erp, Henri van, lecture apparatus for demonstrating, by means of the electric arc, the formation of oxygenated compounds from atmospheric air, A., ii, 35.

Errera, Giorgio, perinaphthindandione,

A., 1, 465. Erthal, Br. See Josef Herzig.

Escales, Richard, and H. Köpke, ammonium cyanate and carbamide, A., i,

Esch, P., the significance of the active constituent of the suprarenal capsules in conjunction with local anæsthetics, A., ii, 136.

Esch, Werner, application of the bromoderivative methods for the assay of vulcanised rubber wares, A., ii, 946.

Eschmann, M. See Max Le Blanc. Espil, R. L., new anhydrous selenites, A., ii, 279.

Esselen, Gustavus J., jun. See Latham

Essner, Jules, Ulex's process for the estimation of nicotine in tobacco extracts and vicotine salts, A., ii, 943.

Estreicher, Tadeusz, and Al. Schnerr, the heat of vaporisation of certain liquefied gases, A., ii, 16.

Estreicher, Tadeusz, and M. Staniewski, calorimetric investigation of chlorine at low temperatures, A., ii, 16.

Estrup, Knud, adsorption experiments with varying degree of dispersion of the adsorbent, A., ii, 20.

Ettinger, L. See Josef Houben.

Eucken, Arnold, the variation of the thermal conductivity of solid nonmetals with the temperature, A., ii, 185. Euler, Hans von, nomenclature of en-

zymes, A., i, 1051.

the cleavage of lactic and pyruvic acids, A., ii, 452.

Euler, Hans von, and Andor Fodor, yeast-gum, A., i, 607.

an intermediate product of alcoholic fermentation, A., i, 950.

Euler, Hans von, and Sixten Kullberg, temperature-coefficient of the decomposition of invertase, A., i, 409, preparation of pure invertase, A., i, 825. the mode of action of phosphatese, A., i, 1051.

chemical composition and formation of enzymes. III., A., ii, 320.

the behaviour of yeast enzymes when free and united to protoplasm, A., ii, 817.

Euler, Hans von, and Gunnar Lundeqvist, fermentation with yeast, A., ii, 640.

Euler, Hans von, and H. Ohlsén, inversion of sucrose in ultra-violet radiation, A., i, 524.

Euwen, C. See Ernst Cohen.

Evans, C. Lovatt. See Edmond William Wace Carlier.

Evans, Percy Edwin. See Humphrey Owen Jones.

Evans, William L., and Edgar John Witzemann, oxidation of m-nitrobenzoylformaldehyde, A., i, 987.

Eve, Arthur Stewart, the ionisation of the atmosphere due to radioactive

matter, A., ii, 89.
the amount of radium and radium
emanation present in the water and
gases of the Caledonia Springs, near
Ottawa, A., ii, 846.

the number of ions produced by the β - and γ -rays from radium-C, A., ii, 956.

Eve, Arthur Stewart, and Douglas McIntosh, the influence of acids and salts on the amount of radium emanation liberated from a solution of radium, A., ii, 841.

the radium contents of specimens from a deep boring at Beechville, Ontario,

A., ii, 846.

Everest, Arthur Ernest, the molecular configuration of 1-methylcyclohexylidene-4-acetic acid and of the oxime of cyclohexanone-4-carboxylic acid, P., 285.

Everest, Arthur Ernest, and Hamilton McCombie, the formation of glyoxalures from acyl derivatives of α-keto-β-anilino-αβ-diphenylethane, T., 1746; P., 209.

the effect of heat on a mixture of benzaldehydecyanohydrin and aniline,

T., 1752; P., 218.

Ewins, Arthur James, the synthesis of 3-β-aminoethylindole, T., 270; P., 20. some derivatives of 4-(or 5-)-methylglyoxaline, T., 2052; P., 259.

the synthesis of damasceninic acid (2-methylamino-3-methoxybenzoic

acid); preliminary note, P., 277.

Ewins, Arthur James, and Frank Lee

Pyman, experiments on the formation
of 4-(or 5-)-\(\beta\)-aminoethylglyoxaline
from histidine, T., 339; P., 45.

Ewins, Arthur James. See also George

Barger.

Eydman, F. H., jun., absorption spectra. III., A., ii, 237.

Eynon, Lewis. See Arthur Robert Ling. Eyre, John Vargas, solubility. I., A., ii, 794.

Eyster, J. A. E., and H. E. Jordan, intravenous injection of pineal extracts, A., ii, 215.

F.

Fabinyi, Rudolf, exact estimation of nitrogen in certain organic compounds, A., ii, 534.

Fabinyi, Rudolf, and Tibor Széki, a nitroso-compound of dimethoxyphenol, and its derivatives, A., i, 856.

Failyer, George Henry, barium in soils, A., ii, 146.

Fairlie, Dorian Macefield. See John Norman Pring.

Fajans, Kasimir, and Walter Makower, the complex nature of radium-C, A., ii, 569.

Fajans, Kasimir. See also H. G. J. Moseley.

Falciola, Pietro, ammonium salts of fatty acids (oleic, palmitic, stearic), and the separation of the saturated fatty acids (palmitic and stearic) from oleic acid. I., A., i, 5.

separation of the liquid fatty acids (unsaturated) from the solid fatty acids (saturated) in natural mixtures of fatty acids, and the ammonium salts of some fatty acids. II., A., i, 174.

separation of saturated fatty acids (palmitic and stearic) from oleic acid, A., ii, 77.

Falciola, Pietro, cryoscopic anomalies of elements of the fourth periodic group, A., ii, 370.

Falciola, Pietro, and Mario Corridi, estimation of the tannin in tanning liquids by means of the Zeiss immersion refractometer, A., ii, 163.

Falk, Kaufman George, transference experiments with thallous sulphate and lead nitrate, A., ii, 90.

the electron conception of valence. II. The organic acids, A., ii, 711.

Falk, Kaufman George, and John Maurice Nelson, electron conception of valency, A., ii, 104.

Falk, Kaufman George. See also Arthur $oldsymbol{A} mos$ Noyes.

Fallada, Ottokar. See Friedrich Stroh-

Farbenfabriken vorm. Friedrich Bayer & Co., preparation of octan-yn-dionea-ol and its homologues, A., i, 102.

preparation of octendione and its homologues, A., i, 114.

preparation of α-bromo-α-ethylbutyrylcarbamide, A., i, 118.
preparation of santalyl alkylamino-

acetates, A., i, 137. preparation of anthrapyrimidines and

anthrapyrimidones, A., i, 167.

preparation of derivatives of \$3dialkylpropionic acids, A., i, 259.

preparation of p-hydroxy-β-phenylethylamine and its derivatives, A.,

preparation of nitrothioxanthones and their derivatives, A., i, 450.

[preparation of diaminocarboxydiphenyl ethers], A., i, 456. [preparation of triphenylmethane de-

rivatives], A., i, 458.

preparation of chloro-substitution products of anthraquinones and of halogenated anthraquinones, A., i,

preparation of methoxyanthraquinones and their derivatives, A., i, 469.

the halogenation of indanthren, A., i,

preparation of azines, A., i, 504.

preparation of tetramethylenediamine [að-diaminobutane], A., i, 526.

preparation of soluble compounds from hydroxymercuricarboxylic acids, A.,

preparation of olefine alcohols of the general formula OH ·CHMe ·CR :CH2, A., i, 598.

preparation of quaternary ammonium

bases, A., i, 609. preparation of hydroxyphenylethyldialkylamines, A., i, 629.

Farbenfabriken vorm. Friedrich Bayer & Co., preparation of hydroxyphenylethylamines and their alkyl ethers, A., i, 629.

preparation of sulphaminobenzoylaminonaphthols and their sulphonic acids, A., i, 630.

preparation of phenyl esters of iodoparaffin acids, A., i, 630.

preparation of mixed formic acetic esters of aloins, A., i, 659.

preparation of formyl derivatives of morphine alkaloids, A., i, 668.

preparation of esters of cinnamic acid, A., i, 858.

preparation of m-hydroxy- β -phenylpropionic acid alkyl ethers and their salts, A., i, 865.

[preparation of anthraquinone derivatives], A., i, 884, 1026.

[preparation of anthracene derivatives], A., i, 903.

[preparation of methylindanthren], A., i, 925.

preparation of iminoalkyl derivatives of azimino-o-toluidides. A., i, 928.

the partial or total replacement of halogens by hydrogen in polyhalogenated aminoanthraquinones, A., i 995.

preparation of substances resembling caoutchouc, A., i, 1003.

preparation of 1-aryl, alkyl, or alkylaryl substituted hydrastinines, A., i,

preparation of nuclear substituted mercury derivatives of halogenated or nitrated phenols, or halogenated nitrophenols, A., i, 1056.

Farbwerke vorm. Meister, Lucius & Brüning, preparation of compounds of unsaturated acids with aldehydes, ketones, and formic acid, A., i, 107. preparation of nitrophenyl mercaptans,

Ā., i, 441. preparation of o-chlorobenzotrichloride.

A., i, 445. preparation of 1:2-diaminoanthraquinone, A., i, 469.

preparation of arylanthraquinonylcarbamides, A., i, 469, 995.

preparation of naphthanthraquinoneazines, A., i, 509.

preparation of anthraquinonylglycines, A., i, 548.

preparation of a nitro-1-aminophenyl-4-arsinic acid, A., i, 594, 760.

preparation of 2:2'-dianthraquinonylcarbamide, A., i, 655.

preparation of phenylbenzyldimethylammonium disulphonic acid, A., i, 852.

Farbwerke vorm. Meister, Lucius & Brüning, preparation of 1:4-dıhydroxynaphthalene monalkyl ethers, A., i, 854.

preparation of p-dialkylaminobenzyl-1aminoanthraquinone, A., i, 995.

preparation of arsenophenols, A., i, 1055.

preparation of aminohydroxyarylarsenious oxides, A., i, 1055.

preparation of nitrohydroxyarylarsenic

acids, A., i, 1056.

Farrell, F. S. See Arthur Amos Noyes. Farrington, Oliver Cummings, meteorite studies. III., A., ii, 407.

Fasson, R. R., Constant Wells Ponder, and German Sims Woodhead, the importance of the temperature factor in the determination of the rate of the activity of certain disinfectants, A., ii,

Faucon, A. See Gustave Massol.

Faust, Edwin Stanton, crotalotoxin from the venom of the North American clapper snake (Crotalus adamanteus), A., ii, 316.

Favre, W., the inhibitory action of inorganic salts on catalase, A., i, 592. Favrel, G., estimation of iodine in

alcoholic solutions, A., ii, 150.

Favrel and Garnier, the proportion of dextrose to lævulose in certain preserved fruits, A., ii, 1036.

Fazio, F. See Francesco Carlo Palazzo. Fedoroff, A. S. See G. J. Petrenko.

Fedotéeff, P. P., the formation of cuprous iodide from the physico-chemical standpoint, A., ii, 42.

Feild, Alexander L. See James Munsie Bell.

Feiser, Jacob Plummer. See Frank Austin Gooch.

Feist, Franz, ring synthesis of pyromellitic acid, A., i, 133.

Feist, Karl, injury to pines by furnace gases, A., ii, 326.

Feld, Walter, the formation of iron disulphide in solutions, and some reactions of thionates, A., ii, 289.

sodium thiosulphate as the standard substance in alkalimetry, A., ii, 769.

Feldman, Israel, and Leonard Erskine Hill, influence of inhalation of oxygen on the lactic acid produced during

hard work, A., ii, 738.

Fellenberg, Theodore von, detection of borie acid in preservatives, A., ii, 657.

colour reactions of aromatic aldehydes and their application in the analysis of spirits, A., ii, 667.

Fellenberg, Theodore von. See also Einst Philippe.

Fellmann, Martin. See Augustin Bistrzycki.

Fellner, M. See Erich Ebler.

Fendler, Georg, examination of raw caoutchouc. Reply to Harries, A., ii,

Fenner, G. See G. Butzbach.

Fenton, Henry John Horstman, and William Arthur Reginald Wilks, method of characterising certain ureides [carbamides], A., i, 269.

colloidal form of Nastvogel's osazone, A., i, 324.

Fernau, Albert, iodometric estimation of sugar in urine, A., ii, 664.

Fernbach, Auguste, biological degradation of carbohydrates, A., ii, 62.

Fernbach, Auguste, and Marcel Scheen, influence that the reaction [of the medium] exerts on certain properties of malt macerations, A., i, 98.

the mechanism of proteoclastic enzymes, A., i, 824.

Fernbach, Auguste, and Jules Wolff, catalytic transformation of starch paste, A., i, 356.

Ferrari, Eugenio. See Giuseppe Oddo.

Ferrario, Enos, phenothioxin, A., i, 555. Ferrario, Enos, and M. Neumann, the Grignard reaction. Syntheses of fluoran, A., i, 316.

Ferrer Hernández, Jaime, simple method of applying Boedeker's reaction, A., ii, 226.

Ferrer Hernández, Jaime, and Angel del Campo y Cerdan, Delepine's phosphorescent esters, A., i, 174.

analytical application of certain xanthates, A., ii, 825.

See G. Charrier. Ferreri, G.

Ferrero, R. See Vincenzo Castellana. Fetzer, K. See Edgar Wedekind.

Feytis, (Mlle.) E., magnetism of some complex salts, A., ii, 367.

magnetic study of the rôle of water in the constitution of solid hydrates, A., ii, 1058.

Fichtenholz, (Mlle.) A. See Emile Bourquelot.

Fichter, [Carl] Fritz [Rudolf], capillary electrical precipitation of positive colloids, A., ii, 100.

Fichter, Fritz, and Franz Rohner, some derivatives of quindoline, A., i, 85.

Fichter, Fritz, and Naima Sahlbom, capillary analysis of colloidal solutions, A., ii, 259.

Fichter, Fritz, and Ph. Sjöstedt, electrolytic oxidation of aromatic sulphides, A., i, 41.

Fiechter, A., method for the reduction of potassium platinichloride in the estimation of potassium by the platinum process, A., ii, 933.

See Rudolf Friedrich Fiederer, M. Weinland.

Figee, Th. See Frans Antoon Hubert Schreinemakers.

Filippi, Eduardo, pharmacological behaviour of certain insoluble preparations of mercury. I., A., ii, 1014.

pharmacological properties of adaline (a-bromo-a-ethylbutyrylcarbamide), A., ii, 1120.

Finch, George, a new apparatus for the quantitative estimation of sulphur trioxide in sulphuric acid, A., ii, 150.

Fincke, Heinrich, estimation of formic

acid in toods, A., ii, 232.

Findlay, Alexander, and Henry Jermain Maude Creighton, solubility of gases in ox-blood and ox-serum, A., ii, 211.

Findlay, Alexander, and Bucchok Shen, the solubility of carbon dioxide in beer, T., 1313; P., 189. Fine, Morris Seide. See Lafayette Bene-

dict Mendel and Frank Pell Underhill. Finger, Hermann, and H. Günzler

[benzoylenecarbamide], A., i, 237. Fingerling, Gustav, effect of food deficient in calcium and phosphoric acid on the secretion of milk, A., ii, 510.

Firth, James Brierley, note on the dehydration of crystals, P., 237.

Firth, James Brierley, and James Eckersley Myers, the action of sodium hypophosphite on copper sulphate in aqueous solution, T., 1329; P., 139.

an apparatus for precipitating, filtering and drying in an inert gas, P.,

Fischel, Richard, histochemical detection of peroxydases, A., ii, 448.

Fischer, Emil, history of diazohydrazides, A., i, 90.

the Walden inversion and substitution processes, A., i, 418.

acetohalogen-glucoses and p-bromophenylosazones of maltose melibiose, A., i, 605.

micro-polarisation, A., ii, 85.

Fischer, Emil, and Reginald Boehner, conversion of glutamic acid and of pyrrolidonecarboxylic acid into proline, A., i, 484.

Fischer, Emil, Karl Freudenberg, Kurt Hoesch, and R. Lepsius, methylcarbonato-derivatives of phenoleurboxylic acids and their use for synthetic operations. V., A., i, 874.

Fischer, Emil, and Albert Göddertz, synthesis of γ-amino-α-hydroxybutyric acid and its trimethyl derivative, A., i, 19.

Fischer, Emil, and Reinhart Groh, production of some amino-acids from phenylhydrazones of ketonic acids by aluminium amalgam, and preparation of the optically active γ-amino-valeric acids, A., i, 773.

Fischer, Emil, and Burckhardt Hel-

ferich, new synthetic glucosides, A., i, 802.

Fischer, Emil, and Efim Semen London, formation of proline in the digestion of gliadin, A., ii, 905.

Fischer, Emil, and Helmuth Scheibler, the Walden inversion. VI. \(\beta\)-aminobutyric acid, A., i, 527.

Fischer, Emil, and Donald D. van Slyke, products from pyrrole-2-carboxylic acid, A., i, 1020.

Fischer, Emil, and Karl Zach, syntheses of bases of the sugar group, A., i, 117.

Fischer, Franz, and Victor Froboese, fractional crystallisation and atomic weight of argon, A., 1i, 202.

Fischer, Franz, Carl Thiele, and Emil Stecher, rapid electroanalysis with stirring by bubbling a gas through the solution, A., ii, 1129.

rapid electroanalysis under reduced pressure, A., ii, 1129.

Fischer, Franz, and Erich Tiede, an electrical tungsten-resistance oven for chemical purposes, A., ii, 694.

Fischer, Franz, and Max Wolf, synthesis of concentrated hydrogen peroxide by means of the silent electrical discharge, A., 11, 1082.

Fischer, Franz. See also Erich Tiede. Fischer, Hans, synthesis of β -menthollactoside and its behaviour in the

organism, A., i, 217.
bile pigments. I., A., i, 803.
Fischer, Hans, and Paul Meyer, bile pigments, III. Hemibilirubin and pigments, its oxidation products, A., i, 1005.

Fischer, Hans, and Friedrich Meyer-Betz, bile pigments. II. Urobilinogen of urine and the nature of Ehrlich's aldehyde reaction, A., i. 1004.

Fischer, Hermann. See Ludwig Knorr. Fischer, Karl von. See Walter Dieckmann.

Fischer, Martin H., the nature of turbid swelling. [Parenchymatous, albuminous, or granular degeneration], A., ii, 309.

the colloido - chemical analysis nephritis, A., ii, 417.

Fischer, Martin H., colloido-chemical analysis of absorption and secretion processes: absorption from the peritoneal cavity, A., ii, 510. Fischer, [Philipp] Otto,

Ferdinand Falco, and Hans Gross, chrysophanic

acid, A., i, 309.

Fischer, Otto, Hans Gross, and P. Neber, chrysophanic acid, frangula-emodin, and some oxonium compounds of anthracene derivatives, A., i, 886.

Fischer, Otto, and A. Sapper, a-methyl-

anthracene, A., i, 279.

Fischer, Otto. See also Richard Meyer. Fischer, P. See Ernst von Meyer.

Fischer, Paul, deformation in mimetic crystals, A., ii, 882.

Fischer, Waldemar M., and P. Miloszewski, the solubility of sodium picrate in solutions of sodium salts, A., i, 193.

Fisher, Henry L. See Nellis B. Foster. Fiske, Augustus Henry, analysis of aboriginal copper objects from Mexico

and Yucatan, A., ii, 726.

Fitzgerald, Mabel Purefoy, the origin of the hydrochloric acid in the

gastric tubules, A., ii, 50. Flack, Martin. See Leon Asher. Flade, Friedrich, passivity, A., ii, 461. Claude. Flamand, See Alexander

Ellinger. Flanders, Fred F. See Otto Folin. Fleischer, Karl. See Martin Freund. Fleischmann, H. See **Johannes**

Scheiber.

Fleisher, Moyer S. See Leo Loeb. Fletcher, Arnold L., the radioactivity of the Leinster granite, A., ii, 89. the radioactivity of some igneous

rocks from Antarctic regions, A., ii, 570.

Fletcher, F., effect of previous heating of soil on the growth of plants and the germination of seeds, A., ii, 530.

Fletcher, Harvey. See Robert A. Millikan,

Fleurent, Emile, and Lucien Lévy, method for the accurate determination of ash in the analysis of vegetable and animal materials, A., ii, 445.

estimation of phosphorus in milk, A., ii, 535.

the mechanism of the partial disappearance of phosphorus in the calcination of organic matters, and a method for estimating the ash in those substances, A., ii, 656.

Flieringa, J., saponin from Trevesia sundaica leaves, A., i, 480.

Flohil, J. Th., a new mode of estimating pentosans by the reduction method, A., ii, 160. copper

Florentin, D. See M. Marqueyrol. Florin, Jean, the spectroscopic recognition of traces of mercury in nitrocellulose; stability in explosives, A., ii, 1033.

Flügel, M. See Theodor Pfeiffer.

Flury, Ferdinand, pharmacology of the rue (Peganum harmala), A., ii, 138. pharmacological properties of certain acid oxidation products of cholesterol, A., ii, 1119.

Flury, Ferdinand. See also Alexander Gutbier and Alexander Schmincke.

Foa, Ida. See Francesco Marino-Zuco. Foch, A., measurement of the range of the a-particles of uranium by the

scintillation method, A., ii, 354. Fodor, Andor. See Eugen Bamberger, Ernst Berl, and Hans von Euler.

Fodor, Otto. See Fritz Ullmann. Foelsing, A., preparation of zinc hydr-

ogen borodisalicylate, A., i, 449. Foerster, Fritz, and J. Yamasaki, electrochemical behaviour of tin, A., ii, 576.

Foerster, Fritz. See also Kurt Eisenreich.

Foëx, G. See Pierre Weiss.

Foglesong, John E. See James B. Garner.

Fokin, Sergius, catalytic reduction of unsaturated organic compounds, A.,i,1. the elaidin reaction, A., i, 5. reactions of certain unsaturated fatty

acids with formaldehyde, A., i, 765.

Folin, Otto, estimation of ammonia in

urine, A., ii, 331.
Folin, Otto, and Frederick C. Blanck, estimation of creatinine from urine,

Folin, Otto, and W. Denis, preparation of creatinine from creatine, A., i, 20. Folin, Otto, and Fred F. Flanders,

estimation of benzoic acid, A., ii, 1039. Fomin, W. See Lco Tschugaeff.

Fontaine, E., modification of Reichert thermoregulator, A., ii, 252.

Foote, Harry Ward, formation of double salts. III. Question of double salt formation between the alkali sulphates, A., ii, 393.

Foote, Harry Ward, and Walter Minor Bradley, solid solution in minerals, with special reference to nephelite, A., ii, 122.

Foote, Harry Ward, and Frank Loyal Haigh, formation of double salts. II. Double cæsium mercuric chlorides forming from acetone, A., ii, 397.

Foote, Harry Ward, and Ralph Walker Langley, an indirect method for estimating columbium and tantalum, A., ii, 71.

a recent method for separating tantalum and columbium, A., ii, 72.

Foote, Harry Ward, and Samuel Ray Scholes, the vapour pressure of hydrates, determined from their equilibria with aqueous alcohol, A., ii, 859.

Foote, Harry Ward, and Percy Talbot

Walden, formation of double salts.

A., ii, 726.

[Hippolyte]Forcrand [de Coiselet], Robert de, thermochemical studies of some binary compounds of the alkali and alkali-earth metals, A., ii, 96.

some probable chemical properties of radium and its compounds, A., ii, 172.

hydrates of potassium fluoride, A., ii, 488.

hydrofluorides of alkali fluorides, A., ii, 583.

hydrates of rubidium and cæsium fluorides, A., ii, 603.

Ford, William Ebenezer, herderite crystals from Auburn, Maine, A., ii, 1102.

analyses of stibiotantalite, A., ii, 1104.

Foreman, Frederick W., hydrolysis of the protein of linseed, A., 341.

fungicidal properties of liver of sulphur, A., ii, 222.

Forli-Forti, Gino. See Guido Bargellini, and Emanuele Paternò.

Forssner, Gunnar, the influence of the fat of the food on the excretion of the acetone substance, A., ii, 135.

Forster, Adolf, action of methyl alcohol in the organism, A., ii, 753.

Forster, Martin Onslow, and Frederik Marinus van Gelderen, the triazogroup. Part XVI. Interaction of nitrosates and sodium azide, T., 239; P., 19.

the triazo-group. Part XIX. Nitrosoazides of dipentene, d-limonene, and

l-limonene, T., 2059; P., 195.
Forster, Martin Onslow, and Sidney
Herbert Newman, the triazo-group. Part XVII. Nitrosoazides of pinene and terpineol, T., 244; P., 19. the triazo-group. Part XVIII.

Triazo-ethylamine, T., 1277; P.,

Forster, Martin Onslow, and Hermann Stötter, dihydrocinnamenylcarbimide, (B-phenylethyl isocyanate), T., 1337; P., 206,

Forster, Martin Onslow, John Robert Trotter, and Jacob Weintroube, studies in the camphane series. Part XXX. Constitution of pernitrosocamphor T., (camphenylnitroamine), P., 259.

Forster, Martin Onslow, and John Charles Withers, studies in the camphane series. Part XXXI. Condensation of camphorquinone with nitromethane, ethyl cyanoacetate and phenylacetonitrile, P., 327.

Forster, Martin Onslow, and AdolfZimmerli, studies in the camphane series. Part XXIX. A new phenyl-hydrazone of camphorquinone, T., 478;

P., 50.

Forster, R. B. See Franz Sachs. Forsyth, William Collins. See Thomas

Stewart Patterson. Fortini, V. See Massimo Tortelli.

Foster, Nellis B., and Henry L. Fisher, creatine and creatinine metabolism in dogs with Eck fistula, A., ii, 744.

Fouard, Eugène, practical method for preparing semi-permeable membranes, applicable to the determination of molecular weights, A., ii, 267.

osmotic measurements of salt solutions and Arrhenius theory of ions, A., ii, 1071.

Fouassin, A. See Édouard Bourgeois. Fourneau, Ernest, salts and esters of alkylaminodithiocarbamic acids, A., i, 528.

Fourneau, Ernest. See also Les Etablissements Poulenc Frères.

Fournier, L. See Adolphe Besson.

Fowler, Alfred, and (Hon.) Robert John Strutt, spectroscopic investigations in connexion with the active modification Spectrum of the of nitrogen. I. after glow, A., ii, 678.

Fowler, Gilbert John, Edward Ardern, and William T. Lockett, the oxidation of phenol by certain bacteria in pure

cultures, A., ii, 139.

Fox, John Jacob, and Arthur Josiah Hoffmeister Gauge, mannitoboric acid, T., 1075; P., 136.

Fox, John Jacob. Johnston Dobbie. See also James

Francesconi, Luigi, and G. Sanna, essential oil of Bupleurum fructicosum, A., i, 658, 896.

Francesconi, Luigi, and P. Scarafia, essential oil of Santolina chamaecyparissus, L. I., A., i, 1001. essential oil of Santolina chamaecy-

parissus, L. II. Action of hydroxylamine, A., i., 1001.

Francesconi, Luigi, and E. Sernagiotto, action of nitrosyl chloride on the essential oil of Bupleurum fructicosum; nitrosochlorides, A., i, 1000. essential oil of Bupleurum fructicosum, Linn., A., i, 1000.

 $\Delta^{1:5}$ -dihydrocuminaldehyde [and] β phellandrene in the essential oil of Bupleurum fructicosum, A., i, 1000.

apparatus for continuous working in fractional distillations in a vacuum, A., ii, 966.

localisation and distribution of the essential oil in Bupleurum fructicosum, Linn., A., ii, 1025.

Nicolas, Franchimont, Antoine Paul nitrilotrimethylnitroaminomethylene, A., i, 19.

Franchimont, Antoine Paul Nicolas, and J. V. Dubsky, reaction products of potassium isocyanate and diaminoacetone hydrochloride; amino- and carbamido - propyleneureine [carbamidomethylglyoxalone], 238.

derivatives of s-diaminoacetone, A., i,

acetylation of substituted acetamides, A., i, 529.

Francis, Arthur Gordon, and Charles Alexander Keane, the nitration of acetylbenzoin and stilbenediol diacetates, T., 344; P., 44.

Francis, Francis Ernest, and Maximilian Nierenstein, action of benzoyl chloride and potassium cyanide on benzoyloxybenzoic acids and on acylated hydroxybenzoyloxybenzoic acids, A., i, 642.

Francis, Francis Ernest. Charles Hugh Clarke. See also

Franck, H. H. See Aladar Skita.

Franck, J., and Lise Meitner, radioactive ions, A., ii, 958.

Franck, J., and P. Pringsheim, the electrical and optical behaviour of the chlorine flame, A., ii, 574.

Franck, J., and W. Westphal, valency in gaseous ionisation, A., ii, 957.

Franck, J., and Robert Williams Wood, the influence on the fluorescence of iodine and mercury vapour of gases with different affinities for electrons, A., ii, 169.

Franck, J. See also Robert Williams Wood.

Frank, E., physiology of blood-sugar, A., ii, 301.

[a simple method for the estimation of sugar in blood], A., ii, 340.

Frank, E., and A. Bretschneider, physiology of blood-sugar. III. The residual reduction in the blood after fermentation, A., ii, 409.

Frank, E., and S. Isaac, the theories of experimental diabetes, A., ii, 310. the disordered metabolism in phosphorus poisoning, A., ii, 315.

Frank, Franz, and Alfred Schittenhelm, protein metabolism, A., ii, 127, 904.

Frank, Fritz, and Gnädinger, investiga-tion of the "urucuri" fruit. I., A., ii, 647.

Frank, Philip, the digestibility of white of egg as influenced by the temperature at which it is coagulated, A., i, 698.

Franke, Adolf. See Richard Pribram. Frankel, Edward. See Louis J. Curtman. Frankl, Theodor, the action of sulphur on the intestine, A., ii, 749.

Frankland, Edward Percy, the action of benzylamine on s-dibromosuccinic acid, T., 1775; P., 206.

a method of determining carbon and nitrogen in organic compounds, T., 1783; P., 207, 309.

Frankland, Edward Percy, and Henry Edgar Smith, the action of aliphatic amines on 5-dibromosuccinic acid. Part I., P., 320.

Frankland, Percy Faraday, and Hugh Henry O'Sullivan, influence of double linking on optical activity; some n-propyl and allyl derivatives of menthol, T., 2325; P., 319.

Franklin, Edward C., potassium ammonoplumbite, A., ii, 983.

electrical conductivity of liquid sulphur dioxide solutions at - 33.5°, - 20°, - 10°, 0°, and + 10°, A., ii, 1052.

Frankovic. See Robert Kremann. Frantz, Friedrich. See Gustav Heller. Franz, Margarete. See Karl Bernhard Lehmann.

Franzen, Hartwig, production of aminoacids in plants, and the action of formaldehyde on potassium cyanide, A., ii, 323.

the aldehyde of leaves, A., ii, 524.

Franzen, Hartwig, and F. Egger, estimation of formic acid, A., ii, 446.

Franzen, Hartwig, and G. Greve, biochemistry of micro-organisms. The fermentation of formic acid by Bacillus kiliense, A., ii, 60. Franzen, Hartwig, and F. Kraft, N-

amino-heterocyclic compounds. III. Properties of a-acylhydrazines, 1amino-2:5-diphenyl-1:3:4-triazole, and 1-amino-2:5-dibenzyl-1:3:4-triazole, A., i, 816.

Franzen, Hartwig, and Hubert L. Lucking, the hydrazinates of some

metallic salts. II., A., ii, 285.
Franzen, Hartwig, and O. von Mayer, detection of carbon monoxide by means of blood, A., ii, 1029.

Franzen, Hartwig, and O. Steppuhn,

alcoholic fermentation, A., ii, 1122. Frazer, Joseph Christie IV hitney. See Harmon Northrop Morse.

Fred, Edwin Brown, increasing the activity of higher and lower plants by small amounts of poisons, A., ii, 1123.

Fredenhagen, Karl, the emission of negative electrons by heated potassium and sodium, and the conductivity of the vapours of these metals, A., ii, 571.

the influence of neutral gases on the absorption of sodium vapour, A., ii, 1043.

Fréedericksz, Vsévolod, dispersion and absorption of chromium and manganese in the visible and ultraviolet spectrum, A., ii, 349.

relation between the optical constants and the potential of metals, A., ii,

Fresenius, Heinrich, and Paul H. M. P. Brinton, estimation of potassium as

potassium platinichloride, A., ii. 333. Fresenius, Heinrich, and A. Czapski, a new radioactive mineral spring at Brambach i. V., A., ii, 686.

Fresenius, Remigius, application of "cupferron" in quantitative analysis, A., ii, 336.

Fresenius, Wilhelm, and Leo Grünhut, estimation of lecithin in oil, A., ii,

Fressel, Hans. See Heinrich Wieland. Freudenberg, Karl. See Emil Fischer. Freund, Martin, preparation of cotarnine salts of organic acids, A., i, 561.

Freund, Martin, and Fritz Achenbach, action of hydroxylamine on some ortho-substituted derivatives of anthraquinone, A., i, 69.

Freund, Martin, Karl Fleischer, and Max Rothschild, action of diethylmalonyl chloride on some substances containing nitrogen, A., i, 236.

Freund, Martin, and Otto Kupfer, stereochemistry of nitrogen compounds; isomeric bishydrocotarnines, A., i,

Freund, Martin, and Karl Lederer, action of organic magnesium compounds on hydrastinine, A., i, 906. cotarnine. VI., A., i, 910.

Freund, Martin, and Edmund Speyer, action of hydrogen peroxide on thebaine, morphine, and their ethers, A., i, 76.

codeine oxide, A., i, 909.

Freundler, Paul, hydroxyindazoles, A., i, 577.

alkyl chloro- and bromo-anthranilates, A., i, 637.

hydroxyindazoles. IV. Preparation of hydroxyindazoles from non-substituted benzene-azo- or -hydrazobenzoic acids, A., i, 753.

benzeneazoxy-o-benzoic acid, A., i, 757. hydroxyindazoles. III. Preparation of ortho-substituted azo-acids, A., i, 757.

hydroxyindazoles. V. Constitution, A., i, 815.

Freundlich, Herbert, and A. Kestovnikoff, kinetics of the transformation of chloroalkylamines into heterocyclic compounds, A., ii, 266.

Freundlich, Herbert, and Morton Masius, adsorption in a solution of several substances, A., ii, 374.

Frey, Ernst, osmotic work of the kidneys. XII. Iodide, nitrate, sulphate, and phosphate are excreted in the urinary tubules, A., ii, 511.

Frey, Max von, the alkaline odour, A., ii, 129.

Frey, Otto, simple method for the estimation of phosphorus in phosphorised

oils, A., ii, 535. Frey, W. See Lothar Wöhler.

Friderici, Egon. See Richard Stoermer. Friedberg, A. See Daniel Vorländer. Friedel, Friedrich. See Emil Abder-

halden.

Friedel, Georges, and Francis Grandjean, anisotropic liquids, A., ii, 1.

structure of liquids with conical focal lines, A., ii, 165.

Friedenthal, Hans, the quantitative chemical analysis of mixtures by utilising differences of specific gravity, A., ii, 555.

Friedenthal, Hans. See also Hilary Lachs. Friedländer, Paul, and St. Kielbasinski, aldehydes of oxindole, indoxyl, and hydroxythionaphthen, A., i, 1021.

Friedmann, B. See Paul Pfeiffer. Friedmann, Ernst, the degradation of carboxylic acids in the animal body. XIII. The behaviour of furylacrylic and furoylacetic acids in the animal body, A., ii, 910.

the degradation of carboxylic acids in the animal body. XIV. The removal of hydrogen in the animal

body, A., ii, 910.

Friedmann, Ernst, and Hermann Tachau, the formation of glycine in the animal body. I. The synthesis of hippuric acid in the liver of the rabbit, A., ii, 906.

Friedrichs, Fritz, new gas wash-bottles, A., ii, 268.

Friemel, C. See Richard Stoermer.

Friend, John Albert Newton, the porosity of iron and its relation to passivity and corrosion, P., 311.

the corrosion of iron. A historical correction, A., ii, 401.

the corrosion and preservation of iron, A., ii, 805.

Friend, John Albert Newton, and Joseph Hallam Brown, the action of salt solutions and of sea-water on iron at various temperatures, T., 1302; P., 156.

Friend, John Albert Newton, Thomas Ernest Hull, and Joseph Hallam Brown, the action of steam on iron at various temperatures, T., 969; P.,

Fries, H., estimation of lactic acid in

blood, A., ii, 994, 1038. Fries, Karl, and A. Hasselbach, oxindigo [2:2-diketo-Δ1:1'-dicoumaran], A., i, 150.

Fries, Karl, and W. Pfaffendorf, condensation products of 2-coumaranone,

A., i, 149. Fries, Karl, and Wilhelm Vogt, isomeric disulphoxides from thianthren, A.,

i, 395., chlorides and bromides of diphenyl sulphide, A., i, 538.

thianthren, A., i, 555.
Fries, Karl, and W. Volk, conversion of coumarins into coumarinic acids and o-coumaric acids. II., A., i, 203.

Friese, Walther, detection of benzoic acid in margarine, butter, and other fats, A., ii, 1142.

Frilley, R., some alloys of metals with silicon and the density of alloys, A., ii, 879.

Friske, Kurt. See Theodor Pfeiffer. Fritzsche, Paul. See Otto Diels. Froboese, Victor. See Franz Fischer. Fröhlich, Alfred. See Richard Chiari. Fröhlich, Emil, resolution of asymmetric diammonium compounds into optical antipodes, A., i, 493. Frohneberg, W. See Theodore Zincke.

Fromherz, Konrad, the behaviour of phydroxyphenylaminoacetic acid in the animal body, A., ii, 314.

the method of action of phenyl-cinchonic acid on the purine purine metabolism of the dog, A., ii, 1016. Fromherz, Konrad. See also Otto Neubauer.

Fry, Harry Shipley, constitution of benzene from the point of view of the corpuscular-atomic conception of positive and negative valency, I. An interpretation of the Crum Brown-Gibson rule. II. Dynamical formulæ and the ultra-violet absorption spectrum of benzene. III. Dynamical formulæ and the ultra-violet absorption spectrum of naphthalene, A., i, 431.

preparation of chromyl compounds,

A., ii, 610.

Fuchs, Dionys, the alteration in the excretion of amino-acids or substances titratable with formaldehyde as a cause of the increase in the Cal.: N ratio after great loss of blood, A.,

the influence of prolonged inanition on the excretion of amino-acids or substances titratable with formaldehyde, A., ii, 58.

Füchtbauer, Christian, conduction of electricity in saturated alkali metal vapour, A., ii, 361.

Furth, Otto von, a new modification of the forensic chemical test for blood, A., ii, 947.

Fürth, Otto von, and Emil Lenk, the significance of imbibition phenomena on the onset and passing off of rigor mortis, A., ii, 750.

Fürth, Otto von, and Carl Schwarz, the distribution of the nitrogen of the extractive substances from mammalian muscle, A., ii, 216.

Fuller, George P. See Philip Howard Cobb. Fuller, H. C., volatility of cocaine, A., i, 317.

Fuller, T. S. See Hermon C. Cooper. Funk, Casimir, synthesis of dl-3:4-dihydroxyphenylalanine, T., 554; P., 56.

probable formation of adrenaline in the animal body, A., ii, 907.

Furno, Alberto. See Emil Abderhalden

Gabbi, G. See G. Poma. Gabillon, M. See Victor Auger. Gabriel, Siegmund, a-amino-ketones, A. i, 212.

condensation product of ethyl phthal iminoisobutyrylmalonate, A., i, 227 compounds of the propane series, A. i, 644, 982.

a-aminoisobutyrophenone, NH₂·CMe₂·COPh, A., i, 991. Gabrilowitsch, O. E. See Efim Semen London.

Gabutti, Emilio, chloral chloroacetate, A., i, 261.

Gadais, J. See L. Gadais. Gadais, L., and J. Gadais, analyses of liquorice juices, A., ii, 948.

Gadamer, Johannes [Georg], dihydroberberine, A., i, 152.

alkaloids of the perennial Papaveraceæ. Papaver orientale and P. lateritium, A., i, 317.

corydalis alkaloids. VII. (Protopine,

glaucine), A., i, 483.

Gadamer, Johannes, and Walter Klee, corydalis alkaloids. VI. Corycavidine, a new alkaloid of the corycavine series, A., i, 318.

Gadamer, Johannes, and Fritz Kuntze, corydalis alkaloids. IX. Corytuber-

ine sub-group, A., i, 1011. corydalis alkaloids. X. Bulbocapnine,

Å., i, 1012.

Gadamer, Johannes, and Ernst Steinbrecher, corydalis alkaloids. V. r-Corydaline and phenylberberine, A.,

Gademann, Ferdinand. See Hans Stobbe. Gaebel, Gustav Otto, Reischauer's titration process for the estimation of diabetic sugar, A., ii, 73.

"salvarsan" in medico-legal investiga-

tions, A., ii, 448. titration of "salvarsan" with iodine solutions, A., ii, 676.

Galeotti, Gino, the isolation of a uricoclastic ferment, A., 1i, 131.

dilatometric investigations of hydrolytic decompositions, A., ii, 257. Gallerani, Guido Tartarini. See Gin-

seppe Venturoli.

Galletly, J. C. See David Spence. Gammeltoft, S. A., the ammonia of the urine and its relationship to gastric

secretion, A., ii, 1115.

Gammeltoft, S. A. See also Valdemar

Henriques.

Gams, Alphonse. See Amé Pictet.

Ganassini, Domenico, new chemical reaction for blood, A., ii, 556.

Ganassini, Domenico, and EverardoScandola, formation of acetaldehyde by the pyrogenic decomposition of some oxalates, A., i, 421.

Gandurin, A.L. See Wassili W. Scharwin. Garavini, OSee Mario Giacomo Levi. Garciá Banús, Antonio. See José Rodri-

guez Mourelo.

Gardner, John Addyman, and William Legge Symes, physiological action of some sodium camphenephosphinates, A., ii, 314.

Abraham.See Arthur Garfunkel, Rosenheim.

Garner, James B., John E. Foglesong, and Roger Wilson, reduction of mercuric chloride by phosphorous acid and the law of mass action, A., ii, 972.

Garner, James B., Blair Sexton, and H. O. Parker, anhydrous formic acid, A.,

i. 831.

Garnier, J. See Timothée Klobb.

Garnier, Leon, influence of potassium dichromate on certain analytical constants of milk, A., ii, 161.

Garnier. See Favrel.

Gartner, P. See F. Robin.

Garver, Madison Monroe, transference and transformations of energy with applications to the theory of solutions, A., 1i, 192.

Gassmann, Th., chemical investigations of healthy and rachitic bones, A., ii,

Gastaldi, Carlo, some solid ammoniates, A., i, 185.

behaviour of some nitroazo-derivatives towards phenylhydrazine, A.,

[detection of ferricyanides], A., ii, 234. chemical composition of a telluride of gold and silver from Nagyag, A., ii, 901.

chemical composition of goldschmidtite, A., ii, 901.
Gastaldi, C. See Giacomo Ponzio.

Gates, Charles Baldwin, replacement of metals in non-aqueous liquids and the solubility of metals in oleic acid, A., ii, 394.

Gatin-Gruzewska, (Mme.) Z., characteristic properties of amylose and amylopectin, A., i, 357.
Gatterbauer, Jos., nature of the so-called

gallisin in commercial starch-syrup, A., i, 837.

Gaubert, Paul, influence of foreign substances dissolved in the mother liquor on the faces of crystals of meconic acid and on their pseudopolychroism, A., ii, 101.

determination of minerals by colour reactions, A., ii, 337.

refractive indices of liquid crystals, A., ii, 949.

Gaucher, Louis, digestion of casein, A., 1i, 1109.

Gaudechon, Henri, dimercurammonium compounds, A., ii, 398.

Gaudechon, Henri. See also Daniel Berthelot.

Gauge, Arthur Josiah Hoffmeister. See James Johnston Dobbie and John Jacob Fox.

Gault, Henri, lactonisation of a-ketonic esters, A., i, 709.

Gault, Henri. See also Edmond Emile Blaise.

Gauthier, D., synthesis of secondary aketo-alcohols, A., i, 415.

synthesis of tertiary a keto-alcohols, A., i, 513.

Gautier, André, bauxite, A., ii, 497. application of methyl-orange in the

colorimetric estimation of titanium, A., ii, 1035.

Gautier, [Emile Justin] Armand, and Charles Moureu, a new thermal water; prototype of a modern physico-chemical study of a mineral water; methods for the estimation of small quantities of lithium, manganese, antimony, bromine, fluorine, rare gases, etc., A., ii, 300.

estimation of bromine, fluorine, lithium, and antimony in mineral waters,

A., ii, 329.

Gautrelet, Jean, action of extracts of invertebrate tissues on blood-pressure, A., ii, 1107.

Gawalowski, A., elaidin and elaidic acid, A., i, 416.

burette for the volumetric estimation of gaseous mixtures, especially of furnace gases, A., ii, 651.

Gay, L., ideal solutions, A., ii, 192. mixtures of acetic acid with normal

liquids, A., ii, 260. the conception of the pressure of expansion, A., ii, 850.

expansion pressure of a normal liquid, A., ii, 1058.

Gaze, R., the yellow colour of alcoholic potash, A., ii, 225.

Gazzetti, C., and C. Sarti, red coloration given by Esbach's reagent [with urine], A., ii, 150.

Gebhard, Kurt, photochemical reactions in laboratory work, A., ii, 66.

Geddert, Heinrich. See Emil Abderhalden.

Gee, Frank Houghton. See David Leonard Chapman.

Geelmuyden, H. Chr., the behaviour of acetone substances in intermediary metabolism, A., ii, 904.

Gehe & Co., preparation of double compounds of carbamide with alkalineearth bromides, A., i, 118.

Gehlhoff, Georg, the glow discharge in rubidium and cæsium vapours, A., ii, 82.

the emission of the series and fundamental spectra in the glow discharge of the alkali metal vapours, A., ii, 83.

Gehlhoff, Georg, the glow discharge and the emission of the alkali-metal vapours, A., ii, 349.

a simple method for the preparation of inert gases, hydrogen and nitrogen in the pure state, A., ii,

Gehrcke, Ernst, and Otto Reichenheim, the Doppler spectrum of the hydrogen coal rays, A., ii, 166.

Geibel, Wilhelm, electrical and mechanical properties of alloys of the noble metals, A., ii, 10, 361.

Geiger, Hans, the transformation of the actinium emanation, A., 683.

Geiger, Hans, and Alois F. Kovarik, the relative number of ions produced by the B-particles from the various radio-

active substances, A., ii, 954. Geiger, Hans, and J. M. Nuttall, the ranges of a particles from various radioactive substances and a relation between the range and period of transformation, A., ii, 953.

Geiger, Hans. See also Ernest Ruther-

ford.

Geiger, Walter. See Hermann Leuchs. Gelderen, Frederik Marinus van. Martin Onslow Forster.

Gemmell, Alexander, [titaniferous melanite from Assynt, Sutherlandshire], A., ii, 300.

Georges, Hans. See Otto Ruff.

Georgievics, Georg von, dyeing with pieric acid, A., i, 537.

anthraquinone derivatives as mordant dyes, and nature of the lakes. I., A., i, 546.

octahydroxyanthraquinone, 548.

Georgievics, Georg von, and Artur Pollak, adsorption in solution. I. Retention of acids by sheep's wool, A., ii, 1070.

Gérard, Ernest, and Verhaeghe, lipoids of animal organs, A., ii, 508.

Gérard, G., reactions which lead to the formation of iodine derivatives, A., i, 289.

Gerber, Adolphe, preparation of alkyl halides and alkyl nitrates of tropeine and scopoleine alkaloids, A., i, 152.

preparation of alkylhalogen derivatives of morphine alkaloids, A., i,

Gerber, C., diastases of the latex of the Japanese mulberry tree (Broussonetia papyrifera), A., ii, 647.

Gerhart, Hilda, habit of crystals of artificial barytes, A., ii, 262.

Germann, Albert F. O. See Georges Baume, Frank Curry Mathers, and Joseph Howard Mathews. See Georges

Gersten, Ewald. See Otto Ruff.

Gesellschaft für Chemische Industrie in Basel, [preparation of a "chlorothioindigo,"], A., i, 481.

preparation of indoxyl derivatives, A.,

i. 675.

Gesellschaft für Teerverwertung, preparation of indigotin from indole, A., i. 497.

Gesing, Richard. See August Michaelis. Gessner, L. See Hermann Ost.

Frederick Hutton, optical Getman, properties of some unsaturated ketones, A., ii, 677.

differences of potential between cad-mium and alcoholic solutions of some of its salts, A., ii, 888.

Geutsch, Curt. See Rütgerswerke-Aktiengesellschaft.

Geys, K., the chemistry of barley glumes, A., ii, 529.

Ghiglieno, Mario, new diethyltrimethylenepyrrole derivatives, A., i, 321.

Giacomo, Amatore de, a microchemical method for demonstrating the presence of guanine in tissues, A., ii, 132.

Gianoli, Giuseppe, direct synthesis of the

glycerides, A., i, 349.

Gibbs, Harry Drake, compounds which cause the red coloration of aniline. II. Effect of sunlight in the absence of oxygen and oxidising influences, and a comparison with the behaviour of mono- and di-methylaniline, A., i, 534.

Gibson, John, and Robert Beckett Denison, precipitation of soluble chlorides by ĥydrôchloric acid, A., ii, 203.

Gies, William John. See J. L. Kantor. Gigli, Torquato, benzidine as a reagent for the recognition of blood stains, A.,

Gigon, Alfred, influence of intake of food on gaseous metabolism and energy production, A., ii, 741.

Gilbard, John Francis Hutchins, a reaction for caulophyllin, A., ii, 670. Gilbert, Adolph, method of dissolving

tinstone, A., ii, 71. Gilbert, L. O. See F. L. Dunlap.

Gill, Eugene Edward. See Harmon Northrop Morse.

Gillett, Horace Wadsworth, temperature measurements in an experimental carboundum furnace, A., ii, 486. Gillette, C. E., fruit of Viburnum len-

tago, A., ii, 529.

Gilmour, Walter. See Carl Hamilton Browning.

Gimingham, Conrad Theodore, action of carbon dioxide on Bordeaux mixture, A., ii, 764.

Ginneken, P. J. H. van, mercurous sulphate as depolariser in Weston and Clark normal cells, A., ii, 179.

Ginneken, P. J. H. van, and Hugo R. Kruyt, normal elements, **A.**, ii,

Ginneken, P. J. H. van. See also Ernst Cohen.

Ginzberg, Alexander, the chemical reactions of kumiss and kephir fermentation. I. The kumiss of the Steppes, A., ii, 140.

the chemical reactions of kumiss and kephir fermentation. II. Artificial kumiss and kephir, A., ii, 140.

Giolitti, Federico, and Federico Carnevali, cementation of nickel steel. I., A., ii, 609.

the cementation of chromium steels, A., ii, 728.

Girard, Pierre, preponderating rôle of two electrostatic factors in the osmosis of solutions of electrolytes; normal osmotic movements, A., ii, 860.

Girardet, Fernand, dissociation of ammoniacal ferrous chlorides and the formation of ferrous nitride, A., ii,

Giuganino, L. See Francesco Marino-Zuco.

Givens, Maurice Hope. See Andrew Hunter.

Gjaldbäk, J. K. See Valdemar Henriques.

Glagoleff, M., the minute structure of the spectral lines of mercury, A., ii,

Glagoleff, P., the regeneration of proteins in the mucous membrane of the stomach, A., ii, 625.

Glassmann, Boris, theoretical consideration of the isomerism of fumaric and maleic acids, A., i, 261.

Glattfeld, J. W. E. See Charles E. Bolser.

Glatz, Ernst. See Julius Schmidt.

Glatzel, Emanuel, normal barium orthothioarsenate, Ba₃As₂O₈, 6H₂O, A., ii,

potassium barium orthothioarsenate. $KBaAsS_4,6H_2O$; (K_3AsS_4 , $Ba_3As_2S_8$, 18H₂O), A., ii, 801.

potassium barium orthothioantimonate, A., ii, 980.

Gleditsch, (Mile.) Ellen, the ratio between uranium and radium in the active minerals, A., ii, 845.

Glendinning, William Gerald. See Cecil Reginald Crymble.

Glenn, T. H., variation and carbohydrate metabolism of bacilli of the pro-

teus group, A., ii, 639. enn, T. H. See als Glenn, See also Albert P. Mathews.

Glenny, A. T., and George Stanley Walpole, the action of rubber on mercurial antiseptic solutions, A., ii, 141.

Glinka, Nikolaus. See Nicolai D. Zelinsky. Glover, Walter Hamis, studies of the processes operative in solutions. Part XIV. The determination of apparent hydration values by means of raffinose, T., 371.

studies of the processes operative in solutions. Part XV. The changes effected by the reciprocal interfer-

ence of sugars (and glucosides) and salts in aqueous solutions, T., 379.

Gnädinger. See Fritz Frank. Gnesotto, Tullio, and Maria ghinotto, magnetic constants of feebly magnetic alloys, A., ii, 251.

Gockel, Albert, the radioactivity of rocks,

A., ii, 174.

Gockel, Heinrich. See Theodor Curtius. Godchot, Marcel, hexahydroacetophenone [cyclohexylmethyl ketone] and hexahydrobenzoylacetone, A., i, 134. hexahydrohippuric acid, A., i, 369.

Godchot, Marcel, and Felix Taboury, catalytic hydrogenation of cyclopent-

anone, A., i, 385. Godden, William. See Frederick William Pavy.

Goebel, Erich. See Emil Abderhalden. Goebel, J. B., calculation of equilibrium constants from cryoscopic measurements, A., ii, 1078.

Goecke, Otto, the electric vacuum fur-

nace, A., ii, 1053. Goecke, Otto. See also Otto Ruff.

Göckel, Heinrich, air-trap for burettes, reagent reservoirs, etc., A., ii, 328.

Göddertz, Albert. See Emil Fischer.

Gödecker, H., and Rudolf Rose, new condenser for vacuum distillations, A., ii, 468.

Göhlich, Wilhelm, a case of poisoning by sewer-gas, A., ii, 221.

Göller, Hermann. See Carl Bülow and Hermann Staudinger.

Goetsch, Emil, Harvey Cushing, and Conrad Jacobson, carbohydrate tolerance and the posterior lobe of the hypophysis cerebri, A., ii, 745.

Maximilian. See Rudolf Goettler, Pummerer.

Goetze, Gustav, a new arrangement for the correct reading of burettes, A., ii,

Goissedet, P. See André Job. Goldacker, Paul. See Walter Schoeller. Goldbaum, Jacob S., determination of the ratio between chlorine and bromine and sodium, A., ii, 271.

Goldberg, Z. See Paul Pfeiffer.

Golden, Ross. See Arthur Wayland Dox.

Goldsbrough, Harold A. See Philip Schidrowitz.

Goldschmidt, Robert, thermal conduc-

tivity of liquids, A., ii, 579.

Goldschmidt, Victor M., the laws of mineral association from the point of view of the phase rule, A., ii, 991.

Goldsobel, A., and E. Sonnenberg, Nylander's test for dextrose, A., ii, 339.

Goldstein, Eugen, investigation of emission spectra of solid aromatic substances by means of the ultra-violet filter, A., ii, 560.

Golla, Frederick Lucien. See Charles Dorée.

Gollmann, Richard. See Otto Diels.

Golodtz, A., new methods of resolving mixtures of liquids with adjacent boiling points or constant-boiling mixtures, A., ii, 1064.

Goloubkine, (Mlle.) G., halogen compounds of rhodium, A., ii, 45.

Golubinzeff, A., rapid estimation of ferric oxide in cement, A., ii, 938.

Gomberg, Moses, and Donald D. van Slyke, triphenylmethyl. XX., A., i, 361.

Gomberg, Moses, and C. J. West, action of halogen acids on hydroxyarylxan-

thenols, A., i, 737.

Gonnermann, Max, saponification of sinigrin, A., i, 189.

Gontermann, W., iron-silicon-carbon alloys, A., ii, 1091.

Gooch, Frank Austin, and Clarence Norman Boynton, separation and estimation of barium in the presence of calcium and magnesium by the action of acetyl chloride in acetone on the mixed chlorides, A., ii, 334.

Gooch, Frank Austin, and Jacob Plummer Feiser, the estimation of silver by electro-deposition from an ammoniacal solution of the oxalate, A., ii, 227.

Gooch, Frank Austin, and Simon Boghos Kuzirian, use of sodium paratungstate in the estimation of carbon dioxide in carbonates and nitric pentoxide in nitrates by loss on ignition, A., ii, 657.

Goode, Philip Burwell.
Paul Baxter. See Gregory

Gorboff, Alex., chemical formulæ of certain eutectics and transition points, A., ii, 264.

Gordin, Harry Mann, crystalline alkaloid of Calycanthus glaucus. IV. Some salt- of a new quaternary base obtained by methylating isocalycanthine, A., i, 903.

Alexander, methylisopropyl-Gorsky, ethylene [δ -methyl- $\Delta\beta$ -amylene], A., i, 249.

Gorsky, Alexander. See also Nicolai D. Zelinsky.

Gorslin, E. E. See Robert A. Cooke.

Gorter, K., coffee. IV., A., i, 221. dioscorine, A., i, 222.

constitution of dioscorine, A., i, 561. Gortner, Ross Aiken, decomposition of

alloxan, A., i, 325. a new decomposition product of keratin which gives Millon's reaction, A.,

i, 697. melanin. II. The pigmentation of

the adult periodical cicada (Tibicen

septendecim), A., ii, 908. elanin. III. The inhibitory action melanin. of certain phenolic substances on tyrosinase. A suggestion as to the cause of dominant and recessive whites, A., ii, 908.

Gortner, Ross Aiken. See also Marston Taylor Bogert.

Gottfried, Arthur, the manganese contents of honeys, A., ii, 824.
Gottlieb, Rudolf, and O. Steppuhn,

estimation of morphine, A., ii, 163.

Gottlob. Kurt.See Carl DietrichHarries.

Goubau, R., action of ethyl alcohol on

arylsulphonyl chlorides, A., i, 433.
Goulding, Ernest, and Russell George **Pelly,** note on p-methoxysalicylaldehyde and its occurrence in the root of a species of Chlorocodon, P., 235.

Goutal, E. See P. Mahler.

Goy. See Albert Stutzer.

Graefe, Edmund, mineral oils from potash-salt deposits, A., ii, 119.

Grafe, E., and D. Graham, the adaptation capacity of the animal organism to over-abundant nutriment, A., ii, 811.

Grafe, Viktor, the biochemical aspect of carbon dioxide assimilation in green plants, A., ii, 521.

the behaviour of green plants towards gaseous formaldehyde, A., ii, 818.

Graff, Walter. See August Michaelis. Graftiau, J., manurial experiments with

sugar beet, A., ii, 648.

Graham, D. See E Grafe.

Gramenitzki, M. J., i fluence of different temperatures on ferments and on the regeneration of fermentative properties, A., i, 98.

Gramont, Antoine de. See Paul Émile Lecoq de Boisbaudran.

See Georges Grandjean, Francis. Friedel.

Grasser, Georg, tannin solutions, A., ii, 1040.

Grave, Ernst, passivity of metals, A., ii, 896.

Gray, George, dissolved matter contained in rain-water collected at Lincoln, New Zealand, A., ii, 327.

Gray, J. A., secondary γ -rays produced by β -rays, A., ii, 355.

Gray, Robert Cochran. See Alexander David Ross.

Gray, Robert Whytlaw. See RobertWhytlaw-Gray.

Grebe, Friedrich. See Bernhard Schön-

Greaves, J. E., estimation of gliadin, A., ii, 674.

Greaves, J. E. See also Thorburn Brailsford Robertson.

Grebe. Leonhard, the ultra-violet absorption of benzene, A., ii, 83.

George,and ErnestGreen, Arthur Arthur Bearder, the alkaline condensations of nitrohydrazo-compounds. Part T., 1960; P., 228.

Green, Arthur George, and Salomon Wolff, aniline black and its intermediate products, A., i, 900.

ArthurGreen, Arthur George, and Edmund Woodhead, action of amines on triphenylcarbinol and tritolylcarbinol, A., i, 481.

Green, Harry H., estimation of potassium in urine, A., ii, 1135.

Green, (Miss) Leila, and (Miss) Brenda Sutherland, the decomposition of diethylenesulphidemethylsulphine hydroxide in aqueous solution, T., 1174;

P., 140. Greenwald, Isidor, effect of parathyroidectomy on metabolism, A., ii, 507.

Greenwood, Harold Cecil, vapour-pressure curves and heat of evaporation of some volatile metals of high boiling point, A., ii, 468.

Gregersen, J. P., phosphorus metabolism, A., ii, 304.

Grégoire, Ach., action of some hydrolysable salts and of some colloids on the higher plants, A., ii, 422.

Greifenhagen, W., Josef König, and A.Scholl, the estimation of starch, A., ii, 1037.

estimation of gelatin, A., ii, 947.

the estimation of carbohydrates by oxidation with permanganate in alkaline solution, Å., ii, 1037.

Greinacher, Heinrich, a new radium perpetuum mobile, A., ii, 684.

Greisenegger, Ignaz K. See Hermann Kaserer.

Grenet, Louis, the tempering of bronzes, A., ii, 42.

Gressel, Emil. See Emil Abderhalden. Greve, G. See Hartwig Franzen.

Greven, Karl, commencement and duration of the excretion of arsenic in urine after the use of Ehrlich-Hata's preparation, dihydroxydiaminoarsenobenzene, A., ii, 511.

Griebel, Constant, composition of the pulp of Cassia fistula, A., ii, 425.

Griffet. See Taurel.

Grignard, Victor, two new methods for synthesising nitriles, A., i, 292.

Grignard, Victor, and Charles Courtot, new derivatives of indene, A., i, 193.

magnesium derivative of fluorene, A., i, 538.

Grimaldi, Carlo, qualitative reactions of oil of turpentine, pine wood oil, and essence of turpentine, A., ii, 231.

Grimbert, Léon [Louis], separation of urobilin from its chromogen, A., i,

Grimmer, W., the peroxydase of milk, A., i, 936.

Grindley, Harry Sands, and E. L. Ross, estimation of inorganic and organic

phosphorus in meats, A., ii, 332. Gripenberg, William Sebastian, photosensitive antimonite [stibnite] cells,

A., ii, 1045.

Grishkewitsch-Trochimowsky, E., oxidation of tertiary alcohols of the tolylallyl series, A., i, 290.

condensation of crotonaldehyde with ammonia and ethyl acetoacetate, A., i, 320.

action of magnesium thienvl iodide on allyl bromide, A., i, 481.

new method of preparation of, and certain derivatives of, thiophen-2aldehyde, A., i, 481.

5-methylthiophen-2-aldehyde, A., i, 806.

Grishkewitsch-Trochimowsky, E. See also J. N. Reformatsky.

Gröber, A., veronal, A., ii, 316.

Gröger, Max, zinc chromates, A., ii,

Groh, Reinhart. See Emil Fischer. Grohmann, Oskar, oxidation of 3- and 7methyluric acids in the presence of ammonia, A., i, 691.

Gros, Oscar, hæmolysis by ammonia, sodium hydroxide, and sodium carbonate, A., ii, 50.

Gros, Oscar, and C. Hartung, narcotics and local anæsthetics, A., ii, 136.
 Gros, Oscar, and James M. O'Connor,

colloidal metals in relation to their physico-chemical properties and their pharmacological action, 418.

Groschuff, Erich, solubility of water in benzene, petroleum, and paraffin oil, A., ii, 595.

Gross, H. See Otto Fischer.

Gross, Oscar, the relationship of nitrogen and sulphur in metabolism, A., ii, 810.

Grossmann, Hermann, and Gustav Jäger, some compounds of organic salts of bivalent metals with ammonia, pyridine, and phenylhydrazine, A., i, 944.

Grosspietsch, O., mangesite deposits of Eichberg on the Semmering Pass; eichbergite, a new sulphantimonite, A., ii, 807.

Grube, F. See Rudolf Pummerer.

Grube, Karl, the influence of ether narcosis on body temperature and carbohydrate metabolism, A., ii, 303.

formation of glycogen from formaldehyde, A., ii, 410.

action of phloridzin, A., ii, 420. Grünbaum, Albert S., and Helen G. Grünbaum, some changes in normal tissues produced by radium, A., ii,

Grünbaum, Helen G. See Albert S. Grünbaum

Grüneisen, Eduard, the influence of temperature on the compressibility of metals, A., ii, 188.

relationships between atomic heat, coefficient of expansion, and compressibility of solid elements, A., ii, 851.

Grünhut, Leo. See Wilhelm Fresenius. Grünthal, Erich. See Gustav Heller.

Grünwald, Hermann Friedrich, the relationship of kidney function and the glycogen of the liver, A., ii, 130.

Grützner, Paul von, and W. Waldschmidt, the laws of enzyme action, A., i, 697.

Grumell, Ernest S., comparison of reaction velocity and the fluidity of the medium, A., ii, 197.
Grund, Rudolf, Schneider's contribution

for the gravimetric estimation of zinc, A., ii, 659.

Gruschke, Georg, refraction and dispersion of light in certain gases, A., ii, 349.

Gryns, G., the permeability of blood-corpuscles in physiological conditions, especially to alkali and alkali-earth metals, A., ii, 49, 740.

Guareschi, *Icilio*, some new derivatives of cyclohexanones, A., i, 792.

pseudo-solutions or apparent solutions according to Francesco Selmi, A., ii, 261.

Günther, Arwed. See August Michaelis. Günzler, H. See Hermann Finger.

Guérithault, B. See Maurice Javillier. Guertler, W., the structure of galvanised iron, A., ii, 898.

Guest, E. D. See James Crosby Chapman.

Guest, Herbert Hartley. See Thomas Burr Osborne.

Guggenheim, Markus. See Emil Abderhalden.

Guglielmo, Giovanni, value of the components of the electromotive force of voltaic couples, A., ii, 179.

Guicciardini, N. See Fernando Ageno. Guichard, Marcel, gases disengaged from the walls of tubes of glass, porcelain, and silica, A., ii, 396.

influence of water vapour on measurements in a McLeod gauge, A., ii, 582.

the extraction of gas from copper heated in a vacuum, A., ii, 803.

extraction of gases from copper by a chemical method and the estimation of oxygen, A., ii, 934.

Guild, F. N., mineralogical notes [cuprodescloizite, etc.], A., ii, 902.

Guillaume, Charles Edouard, anomalous expansion of nickel steels, A., ii, 185.

Guillaumin, C., two new isomerides of thymol, A., ii, 318.

Guillemin, G., and B. Delachanal, occluded gas in alloys of copper, A., ii, 41.

Guillet, Léon, recovery of hammered materials, A., ii, 97.

Gukassianz, Armenak. See Otto Diels. Gulewitsch, Wladimr von, extractives of muscles. XII. Constitution of carnosine, A., i, 815.

Gulick, Louise. See Martin A. Rosanoff Gundermann, Karl, the pharmacological action of some halogen substitution products of iminazoles [glyoxalines], A., ii, 754.

Gundermann, Karl. See also Karl Bernhard Lehmann.

Guntz, Antoine, and Jules Minguin, ultra-violet radiations, A., ii, 241.

Gussmann, Ernst, a very basic chromic acetate, A., 1, 103.

Gutbier, Alexander, colloidal gold, A., ii, 1098.

Gutbier, Alexander, Friedrich Bauriedel, and Carl Julius Obermaier, bromosalts of platinum, A., i, 32.

Gutbier, Alexander, and Ferdinand Flury, tellurium, A., ii, 201.

Gutbier, Alexander, Ferdinand Flury, and Hans Micheler, tellurium, A., i, 182.

Gutbier, Alexander, and G. A. Leuchs, ruthenihalides, A., i, 183.

Gutbier, Alexander, and Karl Maisch, chloro-salts of osmium, A., i, 18.

Gutbier, Alexander, and Carl Julius Obermaier, ethylene- and propylenediammonium aurihalides, A., i, 424.

Gutbier, Alexander, and P. Walbinger, osmichlorides, A., i, 191.

Guy, J. Sam, and Harry Clary Jones, conductivity and viscosity in mixed solvents containing glycerol, A., ii,

Guye, Philippe Auguste, molecular complexity in the liquid state, A., ii, 1067.

Guye, Philippe Auguste. See also N. Boubnoff.

Guyot, Alfred, and F. Vallette, o-dibenzoylbenzene and its homologues, A., i, 652.

Guyot, J., differences in potential of apparent contacts between a metal and electrolytic solutions, A., ii, 1053.

Guzmán Canancio, Julio de, reaction of stannous iron, A., ii, 825.

Gwiggner, A., apparatus for the evolution of large quantities of hydrogen sulphide and partial recovery of the waste gases from precipitation reactions, A., ii, 877.

H.

Haagen, Walter K. van, and Edgar Fahs Smith, the action of hydrogen fluoride on certain oxides, A., ii, 894.

Haakh, Hermann, quinones, A., i, 135.

Haan, J. de. See Hartog Jakob Hamburger.

Haas, Gustav. See Alfred Einhorn.

Haas, Karl. See Carl Bülow, and Alfred Kliegl.

Haber, Fritz, and Gerhard Just, the emission of electrons in chemical reactions, A., ii, 954.

Haber, Fritz, and J. Zawadzki, polarisation of solid electrolytes [the phenomena of passivity], A., ii, 1053. Habermann, H. See Albin Kurtenacker.

Habermann, Josef, Wilhelm Kulka, and E. Homma, the laboratory air and its deleterious constituents, A., ii, 315.

Hackford, John Edward. See Frederic

Stanley Kipping.

Hackspill, Louis, density, coefficient of expansion, and variation in volume on fusion of the alkali metals, A., ii, 185.

preparation of alkali metals, A., ii,

602.

Hackspill, Louis, and Robert Bossuet, temperature at which alkali metals attack water, A., ii, 392.

Hackspill, Louis. WitoldSee also

Broniewski.

Haden, R. L. See Joseph Hoeing Kastle. Hämäläinen, Juho, the fate of cineol (eucalyptol) in the organism, A., ii, 137.

Hämäläinen, Juho, and Lennart Sjöström, the limit of glycuronic acid combination in rabbits immunised against enzymes, A., ii, 309.

Härtel, Richard. See Hans Stobbe.

Häussermann, Johannes. See Edgar Wedekind.

See Hans Murschhauser. Haffmans, H. Hagemann, Oskar, "romauxankalk" in animal metabolism, A., ii, 507. Hahn, Alfred. See Erich Böcker.

Hahn, Friedrich L., isolation of, an enolic dibromide and the course of the reaction in the bromination of acetophenone and similar ketones, A., i, 649.

Hahn, Friedrich L. See also Carl Mannich.

Hahn, Otto, the properties of technically prepared mesothorium and its evaluation, A., ii, 845.

Hahn, Otto. See also Otto von Baever. Haigh, Frank Loyal. See Harry Ward

Hailer, Ekkehard, inhibiting action and germ-destroying power of free sulphurous acid, its salts, and other complex derivatives, A., ii, 1021.

Hain, Johann, a self-acting wash-bottle, A., ii, 715.

Halban, Hans von, kinetics of ammonium salts, A., i, 852.

Halberstaedter, Ludwig. See Julius Morgenroth.

Haldane, John Scott. See Claude Gordon

Douglas.

Clarence Frederic, and Vasco Hale, Emilio Nunez, oxidation of hydrazine. VI. Reaction between mercuric oxide and hydrazine hydrate in alcoholic solution, A., i, 845.

Hale, Clarence Frederic, and Harry Westfall Redfield, the oxidation of hydrazine. V. Reaction between hydrazine. potassium iodate and hydrazine sulphate, A., ii, 929.

Hale, Clarence Frederic, and Fred Floyd Shetterley, anhydrous hydrazine. I. A convenient apparatus for the preparation of anhydrous hydrazine,

A., ii, 718.

Hale, William J., constitution of dehydracetic acid, A., i, 721.

Halenke, A., and M. Kling, detection of nitrogen in organic substances, A., ii, 1131.

Hall, Alfred Daniel, and Norman Harry John Miller, production of acids and alkalis in the soil, A., ii, 429.

absorption of ammonia from the atmosphere, A., ii, 763.

Hall, Isaac Walker, and George Scott Williamson, the dipeptide-splitting action of blood-plasma, and pathological fluids, A., ii, 302.

the peptide splitting ferments of gastric contents in cancer, A., ii,

310.

Hall, Robert A., and James Munsie Bell, physical properties of aqueous solutions containing ammonia and citric acid, A., ii, 657.

Halla, Franz, thermodynamic calculation of electromotive forces. II., A., ii,

Halla, Ottokar, Friedel-Crafts' reaction, A., i, 784.

toluoyl- and xyloyl-picolinic acids, A., i, 1021.

Halle, Walter L., an extraction apparatus, A., ii, 975.

Haller, Albin, and Edouard Bauer, action of ethyl chlorocarbonate on sodium derivatives of ketones prepared by means of sodamide, A., i, $\bar{2}99.$

oximes and phenylalkylisooxazolones obtained from ethyl benzoylpropionate, benzoyl-n-butyrate, and benzoylisobutyrate, A., i, 568. β(-dibenzoyl-β(-dimethylheptane and

aass-tetramethylpimelic acid, A., i,

ketones of the type of α-benzyl-ααdimethylacetophenone; trialkylacetic acids and trialkylmethylcarbinols to which they give rise, A., i, 726.

synthesis of substituted &-diketones, ketonic esters, and enolic esters by means of ketones and sodamide,

A., i, 726.

Halliburton, William Dobinson. See Walter Ernest Dixon. Ram, W. See Eugen Bamberger.

Hamburger, Hedwig, formation lævulic acid from glucosamine, chitin, and chitose, A., i, 834.

Hamburger, Hartog Jakob, J. de Haan, and \vec{F} . Bubanović, the influence of iodoform, chloroform, and other substances soluble in fat on phagocytosis, A., ii, 504.

Hamill, John Molyneux, the bleaching of flour, A., ii, 1001.

Hamlin, Marston Lovell, a tetra-acetyl aminoglucoside, A., i, 529.

automatic filter, A., ii, 976.

Hammarsten, Olof, the preparation of solutions of rennet poor in, or free from, pepsin, A., ii, 998.

the bile of the hippopotamus, A., ii, 1010.

Hammer, W. See Hermann vonDechend.

Hampshire, CharlesHerbert. See Arthur William Crossley.

Hamsik, Ant., pancreatic lipase, A., i,

Handovsky, Hans, and Richard Wagner, some physico-chemical properties of lecithin emulsions and of lecithinprotein mixtures, A., i, 408.

Hanfland, Fritz, a self-regulating gas-burner, A., ii, 714.

Hankin, Ernest Hanbury, tests of cocaine and certain other anæsthetics, A., ii, 162.

Hanriot, [Adrien Armand] Maurice, brown gold, A., ii, 118, 208. adhesiveness, A., ii, 258, 372.

Hanriot, Maurice, and André Kling, action of alkalis on chloraloses, A., i, 524.

action of ammonia on chloraloses, A., i, 525.

Hanriot, Maurice, and François Raoult, magnetisation coefficients of gold, A., ii, 791.

Hansen, Christian Johannes, fall of temperature in high-boiling vapours

at low pressures, A., ii, 468.

Hantzsch, Arthur [Rudolf], keto-enolic equilibrium of ethyl acetoacetate, A., i, 602.

chromoisomerism of pyridine, quinoline, and acridine salts, and its explanation of valency isomerism, A., i, 673.

contradiction of E. Biilmann's interpretation of homochromoisomerism as polymorphism, A., i, 715.

the colorimetric dilution law, A., ii,

Hantzsch, Arthur, and O. K. Hofmann, molecular state of organic ammonium halides in non-dissociating media,

A., i, 608. Hanus, Josef, and O. Kallauner, the action of hydrogen and sodium per-

oxides on bismuth salts, A., ii, 404. Hanus, Josef, and Arn Soukup, the estimation of copper by means of hypophosphorous acid, A., ii, 441.

Happe, Gustav, a safety wash-bottle, A, ii, 715.

Harcourt, Augustus George Vernon, and Herbert Brereton Baker, the alleged complexity of tellurium, T., 1311; P., 187.

Harden, Arthur, and Hugh Maclean, the alleged presence of an alcoholic enzyme in animal tissues and organs, A., ii, 215.

the oxidation of isolated animal tissues, A., ii, 905.

Harden, Arthur, and Dorothy Norris, the diacetyl reaction for proteins, A., i,

Harden, Arthur, and Sydney Gross Paine, the influence of salts on the

autofermentation of yeast, P., 103.

Harden, Arthur, and William John
Young, the composition of the hexosephosphoric acid formed by yeast-juice. I., A., i, 422.

the influence of arsenates and arsenites on the fermentation of sugars by yeast-juice, A., ii, 519.

Harding, Victor John, substitution in aromatic hydroxy-compounds. Part I. The action of nitric acid on gallic acid trimethyl ether and pyrogallolcarboxylic acid trimethyl ether, T., 1585; P., 213.

Harding, Victor John. (Miss) Gertrude
Maud Walsh, and Charles Weizmann, β-methyl-Δαλ-dodecadiene and βmethyl-Δαλ-decadiene, T., 448; P., 12.

Hardman, Robert Taylor, and Arthur Lapworth, electromotive forces in alcohol. Part II. The hydrogen electrode in alcohol and the influence of water on its electromotive force, T., 2242; P., 244.

Hardman, Robert Taylor, and James Riddick Partington, an application of Kirchhoff's equation to solutions (a contribution to the thermodynamic theory of solubility), T., 1769; P., 221.

Hardy, P., and Jos. Vandormael, partial analysis of natural phosphates as a guide to their conversion into superphosphates, A., ii, 333,

Hardy, William Bate, electrolytic colloids, A., ii, 378.

Haret, Jacques Danne, and A. Jaboin, new method for introducing radium into the tissues, A., ii, 418.

Hári, Paul, the influence of intravenous blood transfusion on the metabolism of matter and energy, A., ii, 739.

Harnack, Erich, and Hermann Hildebrandt, [physiological] action chloromorphides, A., ii, 516.

Harold, C. H. H., Maximilian Nierenstein, and Herbert Eldon Roaf, the influence of the presence and position of the various radicles of adrenaline on its physiological activity, A., ii, 136.

Harries, Carl Dietrich, examination of raw caoutchouc; reply to Fendler,

A., ii, 545.

Harries, Carl Dietrich, and Kurt Gottlob, decomposition of terpenoid substances by glowing metallic wires, A., i, 798.

Harries, Carl Dietrich, and Neresheimer, butadienes and some synthetic caoutchouc obtained therefrom, A., i, 798.

Harris, Albert Buckley. See Frederick

George Donnan.

Harrison, John B., [composition of rainwater: British Guiana], A., ii, 530.
Hart, Edwin Bret, and W. H. Peterson,

sulphur requirements of farm crops in relation to the soil and air supply, A., ii, 431.

Hartley, Ernald George Justinian, the constitution of the organic cyanides, T., 1549; P., 211. ferro-

Hartley, Harold Brewer, and William Henry Barrett, the determination of the density of liquids, T., 1072; P., 100.

Hartley, Walter Noel, mineral constituents of a dusty atmosphere, A.,

ii, 558.

Hartley, Walter Noel, and Otway Henry Little, the course of chemical change in quinol under the influence of radiant energy, T., 1079; P., 137.

Hartmann, Erich, spectrometric examination of Guthzeit's cyclobutane

derivatives, A., i, 208. Hartmann, M. L. See Raymond Calvier

Benner. Hartogs, J. C. See Arnold Frederik Holleman.

Hartung, Curt, the action of crystalline aconitine on the isolated frog's heart, A., ii, 1016.

the action of crystalline aconitine on the motor nerves and skeletal muscles of cold-blooded animals, A., ji, 1016.

Hartung, Curt B., molecular complexity of salts in phenol, A., ii, 697.

Hartung, Curt B. See also Oscar Gros. Harvey, W. Henwood, auto-intoxication and nephritis in rabbits, A., ii, 1013.

Hasenbäumer, Julius. See Josef König. Hasenfratz, V. See Albert Arnaud. Hasselbach, A. See Karl Fries. Hasselbalch, K. A., electrome

electrometric measurements [of acidity] in liquids containing carbon dioxide, A., ii, 182.

Hasselbalch, K. A., and J. Lindhard, estimation of sugar by safranine, A., ii, 73.

Hasselt, J. F. B. van, the pepsin-chymosin question, A., i, 248.

constitution of bixin, A., i, 550.

Hassler, C. See Josef König.

Hatfield, William Herbert, the chemical physics involved in the precipitation of free carbon from the alloys of the iron-carbon system, A., ii, 401.

the influence of vanadium on the physical properties of cast iron, A.,

ii, 1092.

Hatschek, Emil, the viscosity of the dispersoids, A., ii, 19, 98.

some reactions in gels, A., ii, 378.

formation of layers in heterogeneous systems, A., ii, 972.

stability of oil-water emulsions, A., ii,

Hattensaur, Georg, estimation of arsenic

in pyrites, A., ii, 1028.

Hattrem, W. M., and Philip Bouvier

Hawk, effects of copious water drinking with meals on intestinal putrefaction, A., ii, 213.

Hauser, F. See Robert Kremann.

Hauser, Fr., effect of electric and magnetic fields on the spontaneous charging of polonium; the penetration power of δ-rays, A., ii, 685.

Hauser, Otto, schaumopal [float-stone],

A., ii, 808.

Hauser, Otto, and H. Herzfeld, blomstraudine from the Urals, A., ii, 46. Hausser, W. See Carl Ramsauer.

Haussmann, Walther, the sensitising action of hæmatoporphyrin, A., ii, 138.

Havelock, T. H., optical dispersion: an analysis of its actual dependence on physical conditions, A., ii, 165.

Hawk, Philip Bourier, effects of copious water drinking with meals on the pancreatic function, A., ii, 214. analysis of the urine of the fox, dog,

and coyote, A., ii, 308.

fasting studies. II. Catalase content of tissues and organs after prolonged fasting, A., ii, 411,

Hawk, Philip Bouvier, catalase content of tissues and organs after prolonged fasting, A., ii, 412.

Hawk, Philip Bouvier. See also W. M. Hattrem, Paul E. Howe, H. A. Mattill, S. A. Rulon, F. Wills, and S. R. Wreath.

Haworth, Walter Norman, WilliamHenry Perkin, jun., and Otto Wallach, on $d\tilde{l}$ - and d- Δ^2 -m-menthenol(8) and dl- and $d \cdot \Delta^{2:8(9)}$ -m-menthadiene, T., 118; P., 4.

Hayworth, William P. See Samuel Shrowder Pickles.

Headden, William P., meteoric iron from Currant Creek, Colorado, A., ii, 1106.

Hébert, Alexandre, pyrogenic decomposition of metallic xanthates, A., i,

composition of various oleaginous seeds from French West Africa, A., ii,

shea butter, **A**., ii, 1126.

Hecht, Leopold. See Otto Ruff.

Heckel, Edouard, action of cold, of chloroform, and ether on Eupatorium

triplinerve, A., ii, 761.

Hecking, Arnulf. See Carl Bülow.

Heczko, Arnold, lecture experiment for demonstrating chemical lumines-cence, A., ii, 269. estimation of tartaric acid, A., ii, 341. estimation of total tartaric acid [in crude materials], A., ii, 342.

Hedenström, A. von, preparation of oxalic acid by the fusion of sawdust with potassium hydroxide, A., i, 767.

Hedin, Sven Gustav, the rennet zymogen of the calf's stomach, A., ii, 621. the specific inhibition of rennet, and differences between rennets, A., ii,

Heerdt, Walter. See Hugo Weil. See Max Busch. Hefele, Georg.

Heide, Karl von der, and W. I. Baragiola, chemistry and analysis of wines: a criticism of methods and interpretation of results, A., ii, 529.

Heide, Richard von der, a re-fill burette. A., ii, 651.

improved rapid condenser and extraction apparatus, A., ii, 651.

Heiduschka, Alfred, forensic detection of veronal, A., ii, 816.

Heiduschka, Alfred, and Theodor Biechy, estimation of arsenic in urine after the administration of salvarsan, A., ii, 537.

Heiduschka, Alfred, and Anton Reuss, estimation of arsenic in arsenical greens, A., ii, 438. Heiduschka, Alfred, and E. Rheinberger, fatty acids of cod-liver oil, A., i, 766. Heiduschka, Alfred, and H. Riffart,

bixin, A., i, 315.

Heilbron, Isidor Morris, and Forsyth James Wilson, contributions to our knowledge of semicarbazones, P., 315.

Heilbron, Isidor Morris. See also George Gerald Henderson.

Heilner, Ernst, the fate of subcutaneously administered sucrose in the animal body, and its effects on protein and fat metabolism, A., ii, 635.

Heim, Friedrich, auto-decomposition of phenylnitromethane, A., i, 28.

stereoisomeric β-nitro-a-methoxy-aβdiphenylethanes prepared by the addition of alkali methoxide to 7nitrostilbene, A., i, 717.

condensation of ω-nitrotoluene with benzaldehyde; cis- and trans-7nitrostilbene, A., i, 717. Heimrod, George William, and Phæbus

A. Levene, the oxidation of aldehydes in alkalin⊬ solution, A., i, 13.

Heinisch, Wilhelm, formation of graphite, A., ii, 391.

See Julius Schmidt. Heinle, Eugen.

Heinze, Berthold, soil-bacteriological investigations, A., ii, 320.

Heinzelmann, Alfred, colorimetric estimation of mercury in urine, A., ii, 772.

Heinzelmann, Alfred. See also Otto Ruff.

Heitman, Arnold H. C. See Erik Clemmensen.

Hekma, Ebel, the stimulating effect of chloride of calcium and of intestinal mucous membrane extract on the action of trypsin, A., i, 511.

Helferich, Burckhardt. See Emil Fischer.

Heller, Gustav, [constitution of benzoyl-

anthranil], A., i, 81.
Heller, Gustav, Friedrich Frantz, and Heinrich Jürgens, o-nitrophenylglyoxylic acid, A., i, 864.

Heller, Gustav, and Erich Grünthal,

the constitution of anthranil, A., i,

Heller, Gustav, and Siegmund Schmeja, dihydroquinaldine bases, A., i, 747.

Heller, Gustar, and Walter Tischner, the course of the Sandmeyer reaction, A., i, 243.

Hemmelmayr, Franz von, trihydroxybenzoic acids, A., i, 983.

Hempel, H. See Adolf Beythien.

Hemsalech, Gustave Adolphe, line spectrum of air given by the self-induction spark, A., ii, 449,

Hemsalech, Gustave Adolphe, spectrum of air given by the initial discharge of the spark with self-induction, A., ii, 558.

Henderson, George Gerald, and Robert Boyd, contributions to the chemistry of the terpenes. Part XII. Synthesis of a menthadiene from thymol and of a diethylcyclohexadiene from phenol,

T., 2159; P., 276. Henderson, George Gerald, and Isidor Morris Heilbron, contributions to chemistry of the terpenes. The action of chromyl chloride, nitrous acid, and nitric acid on bornylene, T., 1887; P., 248. the constitution of camphene, T., 1901; P., 249.

Henderson, George Gerald, and (Miss) Maggie Millen Jeffs Sutherland, contributions to the chemistry of the Part IX. The oxidation of camphene with hydrogen peroxide, T., 1539; P., 211, 277.

Henderson, Lawrence Joseph, process of acid excretion, A., ii, 752.

instability of dextrose at the temperature and alkalinity of the body, A., i, 769.

Henderson, Yandell, and Frank Pell Underhill, acapnia and glycosuria, A., ii, 813.

Henderson, Velyen E., the inhibition of the action of chemical muscle-stimuli by non-electrolytes, A., ii, 55.

Hendrick, James, field trials with nitrogenous manures from the atmosphere, A., ii, 650.

Henglein, M., barytes from the Freiberg

mining district, A., ii, 902. Henjes, Friedrich. See Otto Wallach. Henkel, Paul, oxidation of α and β -

dimethyluracils, A., i, 159.

Wilhelm, amount Henneberg, glycogen in differently-fed veast cultures, A., ii, 519.

Hennicke, Rudolf. See Hans Stobbe.

Henning, F. See Ludwig Holborn. Henri, Victor, ultra-violet radiation from quartz-mercury lamps, A., ii, 833.

influence of different physical conditions on the ultra-violet radiations from quartz-mercury lamps, A., ii,

Henri, Victor. See also Henri Bierry. Henrich, Ferdinand, Beckmann trans-

formation, A., i, 650.

Henriet, H., and M. Bouyssy, method for measuring the degree of vitiation of a confined atmosphere, A., ii, 532.

Henriot, Emile, the radiations of the alkali metals, A., ii, 354. radiation of rubidium, A., ii, 571.

Henriques, Valdemar, and Gammeltoft, estimation of urea in urine, A., ii, 670.

Henriques, Valdemar, and J. K. Gjaldbäk, plastein formation, A., ii,

Henze, Martin, iodogorgonic acid, A., i, 617.

occurrence of betaine in cephalopods, A., ii, 216.

the blood of ascidians. I. Vanadium compound in the blood-corpuscles, A., ii, 740.

Henzerling, Carl, ethylcreatinine, A.,

Hérissey, Henri, and C. Lebas, occurrence of aucubin in Garrya, spp., A., ii, 63.

utilisation of aucubin by Aspergillus niger, A., ii, 759.

Heritage, Gertrude L. See Elmer Peter Kohler.

Herman, I. See Edmond Émile Blaise. Hermann, Gottfried, the combining power of the chlorides of copper, lead, iron, zinc, tin, and bismuth, and the combining power of the chlorides, bromides, and iodides of copper and cadmium, and the sensitiveness of the solid solutions to light, A., ii,

Hernando, the influence of substances of the digitalin group on blood-pressure in the rabbit, A., ii, 1017.

Herold, Julius, jun., assay of [commercial] gelatin, A., ii, 348.

Herrmann, Felix, simple method for the estimation of formaldehyde, A., ii,

Herrmann, Georg. See Karl Bernhard Lehmann

Herschel, P. See Reinhold von Wal-

Herschfinkel, Heinrich, action of the radium emanation on thorium salts, A., ii, 843.

attempts to prepare metallic radium, A., ii, 844.

Herter, Christian Archibald, and Carl Ten Broeck, biochemical study of Proteus vulgaris, A., ii, 758.

Herterich, August. See Julius Tafel. Herting, Otto, estimation of chlorides in

bromides, A., ii, 435. assay of sweet spirits of nitre, A., ii,

662. Hertkorn, J., the toxic action of the free fatty acids in animal and vegetable fats and oils, A., ii, 138.

balling-together phenomena, A., ii, 190.

Hertwig, Oscar, investigations with mesothorium on animal germ cells: an experimental proof of the idioplasmic nature of the nuclear material, A., ii, 1118.

Hertz, G., the ultra-red absorption spectrum of carbon dioxide in its dependence on pressure and partial

pressure, A., ii, 830.

Herwerden, (Fräulein) H. A. van, and Wilhelm Eduard Ringer, the acidity of the gastric juice of Scyllium stellare, A., ii, 1109.

Herz, Walter [George], solubility studies, A., ii, 261.

reactions of mercurous chloride, A., ii, 285.

solubility of aluminium hydroxide, A., ii, 728.

equilibrium $CaSO_4 + Na_2CO_3$ $\rightleftharpoons \text{CaCO}_3 + \text{Na}_2\text{SO}_4$, A., ii, 79 $\tilde{4}$. equilibria in the precipitation of lead

carbonate, A., ii, 972.

velocity of racemisation, A., ii, 974. Herz, Walter, and Alfred Bulla, the periodides and perbromides of the alkaline earth metals, A., ii, 801.

Herzbaum, Alex. See Emilio Noelting. Herzen, Edouard, representation of the vapour pressures of aqueous ammoniacal solutions, A., ii, 390. reciprocal solubility of sodium carbon-

ate and sodium hydrogen carbonate

in water, A., ii, 724.

Herzenstein, (Miss) Anna. See Wilhelm Schlenk.

Herzfeld, H. See Otto Hauser.

Herzig, Josef, and Br. Erthal, alkylation in the nucleus, A., i, 777. hexa-and penta-methylphloroglucinol,

A., i, 778.

Herzig, Josef, FranzWenzel, Schwadron, and Karl Zeidler, tetra-and penta-methylorcinol, A., i, 776. Herzog, Eduard, detection of fusel oil in

brandy, A., ii, 446.

Herzog, Johannes, and K. Budy, quaternarv ammonium chlorides diphenylcarbamide chloride pyridine or quinoline, A., i, 680.

Herzog, Reginald Oliver, preparation of pure invertase, A., i, 1052.

solutions, A., ii, 23.

the viscosity of colloidal solutions, A., ii, 373.

Herzog, Reginald Oliver, and R. Betzel, the theory of disinfection, A., ii. 1020. Herzog, Reginald Oliver, and A. Meier,

action of oxydases. II., A., i, 936. Herzog, Reginald Oliver, and Polotzky, action of oxydases. I., A., i, 935.

Herzog, Reginald Oliver, and Otto Ripke, behaviour of certain mould fungi towards organic acids. I., A., ii, 915.

Herzog, Reginald Oliver, Otto Ripke, and O. Saladin, behaviour of certain mould fungi towards organic acids. II., A., ii, 915.

Herzog, Reginald Oliver, and O. Saladin, alteration in the fermentative properties of yeast cells on killing by means of acetone, A., ii, 914.

behaviour of certain mould fungi towards amino acids, A., ii, 915.

Herzog, Reginald Oliver, and P. Slansky, the optically active modifications of lactic acid, A., i, 764.

Hesehus, Nicolaus A., dependence of contact electrification on the capacity of ionic dissociation and on superficial

density, A., ii, 13. **Hess**, Frank Lee, and Roger Clark Wells, struverite from the Black Hills, South Dakota, A., ii, 499.

Hess, Kurt. See Ludwig Knorr.

Hesse, August, and W. D. Kooper, is the so-called peroxydase actually a ferment ? A., i, 592.

Hesse, [Julius] Oswald, lichens and their characteristic constituents. XII., A., i, 208.

Hetper, Joseph, the action of potassium permanganate on organic compounds, A., ii, 339.

Heublein, O. See J. Tillmans.

Wolfgang, chemical con-Heubner, stitution and physiological action A., ii, 515.

Heurung, A., magneto-optical effects exhibited by chlorine and iodine, A., ii, 963.

Hevesy, Georg von. See Richard Lorenz. Heyer, R. See Richard Zsigmondy.

Heygendorff, von, cheap crucible supports, A., ii, 199.

Heyl, Frederick William, and Lemuel Charles Raiford, analysis of Zygadenus intermedius. I., A., ii, 325.

Heyn, E., theory of the formation of graphite in iron alloys, A., ii, 391. ibbert, (Miss) Eva. See Edmund

Hibbert, (Miss) Eva. Knecht.

William Brooks, the use of sulphur monochloride in the determination and analysis of the rare earth minerals, A., ii, 934.

Hicks, William Longton. See Arthur

Walsh Titherley.

Higgins, Harold L., and Francis Gano Benedict, some energy factors of the urine excreted after severe muscular exercise, A., ii, 909.

Higgins, Harold L. See also Joseph Barcroft and Francis Gano Benedict.

Higgins, Sydney Herbert, the action of carbon dioxide in the bleaching process, T., 858; P., 67.

an experimental investigation of the bleaching process, P., 314. Hilbing, W. See Julius Bredt.

Hildebrandt, Hermann, pharmacological and chemo-therapeutic studies in the toluidine series, A., ii, 514.

[physiological action of] thebaine, morphothebaine, thebenine, some of their derivatives, A., ii,

Hildebrandt, Hermann. See also Erich Harnack.

Hildebrandt. Karl.See RichardStoermer.

Hildesheimer, Arnold. See Carl Neu-

berg.

Hilditch, Thomas Percy, the relative effect of ethylenic and acetylenic linkings on optical rotatory power, T., 218; P., 6.

the effect of contiguous unsaturated groups on optical rotatory power. Part VI. The influence of the carbonyl group on optical rotatory power. Part VII. The relative influences of aromatic and hydroaromatic nuclei on optical rotatory power. Part VIII. The influence on optical activity of two contiguous unsaturated groups in comparison with that of one unsaturated group at varying distances from the optically active complex, T., 224;

the intramolecular condensation of aromatic sulphinic acids. Part II. The interaction of aromatic disulphoxides and sulphuric acid, T., 1091; P., 139.

molecular rotatory power in normal homologous series. Part I. Optically active derivatives of the higher aliphatic alcohols and acids, P.,

effect of molecular symmetry on the optical activity and relative rotatory power of aromatic position isomerides, A., i, 892.

Hilditch, Thomas Percy, and Albert Ernest Dunstan, the correlation of viscosity with other physical properties.
Part I. The ethenoid and ethinoid unsaturation, P., 93.

Hilditch, Thomas Percy, and Samuel

Smiles, intramolecular rearrangements of diphenylmethane q-sulphoxide, T.,

145 ; P., 3.

Hilditch, Thomas Percy, and Samuel Smiles, a synthesis of derivatives of phenothioxin, T., 408; P., 44.

the constitution of dehydro-B-naphthol sulphide and the interaction of sulphuric acid with aromatic o-hydroxysulphoxides, T., 973; P. 123.

Hilditch, Thomas Percy. See also Harold Christopher.

Hilgendorff, G. See Emil Erlenmeyer. Hill, Archibald Vivian, the position occupied by the production of heat in the chain of processes constituting a muscular contraction, A., ii, 215.

Hill, Arthur Joseph. See Treat Baldwin Johnson.

Hill, C. W. See Charles W. Stoddart. Hill, Charles Alexander, crystallisation of sodium salicylate solution, A., i, 53.

Hill, Harry S. See Richard Sidney Curtiss.

Hill, John Robertshaw. See Wyndham Rowland Dunstan.

Hill, Leonard Erskine. See Israel Feldman.

Hilpert, Siegfried, and Johannes Beyer, ferroso-ferric oxide and ferrous oxide, A., ii, 729.

Hilpert, Siegfried, and Theodor Dieckmann, arsenides. I. Iron and manganese arsenides, A., ii, 985. the ferromagnetic compounds of manganese with phosphorus, arsenic, antimony, and bismuth, A., ii, 1090.

Hilpert, Siegfried. See also Edward Colver-Glauert.

Himmelbauer, Alfred, the scapolite group, A., ii, 297.

Hinard, G., analysis of liquids containing a large quantity of tartaric acid and small amounts of glycerol and tannin, A., ii, 942.

Hinds, J. I. D., a simple hydrogen sulphide generator, A., ii, 272. sulphite method for separating and identifying calcium and strontium,

A., ii, 440. Hinrichs, Gustave Dethlef, atomic weight of hydrogen, A., ii, 977.

atomic weights of the dominant elements, A., ii, 1080.

Hinrichsen, Friedrich Willy, theory of the vulcanisation of caoutchouc, A., i, 550.

cold vulcanisation, A., i, 550.

Hinrichsen, Friedrich Willy, and Theodor Dieckmann, analysis of chromium tungsten-steel, A., ii, 156.

Hinrichsen, Friedrich Willy, and Erich Kindscher, direct estimation of caoutchouc as tetrabromide, A., ii, 445.

Hinsberg, Oscar, ionogenic atomic groups and atoms, A., ii, 873.

Hirniak, Julius, periodic reactions, A., ii, 196.

Hirsch, Paul. See Emil Abderhalden. Hissink, David Jacob, the colloidal substances in the soil and their estimation, A., ii, 443.

Hock, Heinrich. See Karl Andreas Hofmann.

Hocson, Felix. See Hans Aron. Hodges, E. Rattenbury, an organometallic compound of the aniline series, A., i, 191.

a simple hydrogen sulphide apparatus, A., ii, 1084.

Höbold, K. See Karl Andreas Hofmann. Höhn, Fritz, and Ignaz Bloch, dithioacids (carbithionic acids), A., i, 48.

Höhn, Fritz. See also Ignaz Bloch. Hoehn, Karl. See Rudolf Friedrich

Weinland.

Hönel. See Robert Kremann.

Hönigschmid, Otto. See TheodoreWilliam Richards.

Hoesch, Kurt. See Emil Fischer.

Hoesslin, Heinrich von, and E. J. Lesser, velocity of decomposition of foodprotein and body protein, A., ii, 904.

Hoff, Jacobus Henricus van't, synthetical

enzyme action. II., A., i, 99. **Hoffman**, Alfred. preparation of diacetone alcohol from acetone, A., i,

Hoffman, Charles. See Henry Lord Wheeler.

Hoffmann, F., La Roche & Co., a solid molecular compound of hexamethylenetetramine and guaiacol, A., i, 127.

preparation of unsaturated dihalogenated aliphatic acid chlorides, A., i, 601.

Hoffmann, Josef, solid solutions of iron and manganese borides, A., ii, 116. two new methods for the preparation of hydrogen bouides, A., ii, 279.

preparation of selenium boride from iron and manganese borides, A., ii,

Hofmann, Karl Andreas, and Oskar Ehrhart, melamazine from hydrazine salt and dicyanodiamide, A., i, 843.

Hofmann, Karl Andreas, and Heinrich Hock, nitrogen chains: diazohydrazides from diazotetrazole, A., i, 1047.

Hofmann, Karl Andreas, Heinrich Hock, and Heinrich Kirmreuther, action of nitrous acid on aminoguanidine and Difference between on semicarbazide. the tetrazen, $C_2H_8ON_{10}$, and azoimides in their behaviour towards hydriodic acid, A., i, 359.

Hofmann, Karl Andreas, and K. Höbold, perchlorates of the choline and neurine Detection of choline and group.

neurine, A., i, 608. Hofmann, O. K. See Arthur Hantzsch. Hofmeier, F. See Robert Kremann.

Hohlweg, Hermann, the influence of muscular work on the decomposition of subcutaneously-administered sugar, A., ii, 127.

Holborn, Ludwig, and F. Henning, comparison of platinum thermometers with the nitrogen-, hydrogen-, and heliumthermometer, and the determination of certain fixed points between 200° and 450°, A., ii, 852.

Holdcroft, A. D., solubility of zinc oxide in fused lead silicate and borate, A., ii, 983.

See also Joseph Holdcroft, A. D. William Mellor.

Holde, David, and Julius Marcusson, estimation of free fatty acids in fats in the presence of soap and alkaline earth soaps, A., ii, 1037.

Holdermann, Karl. See Roland Scholl. Holland, William West. See Harmon Northrop Morse.

Holle, Hermann. See Arnold Reissert. Holleman, Arnold Frederik, the rules of substitution in the benzene nucleus, A., i, 713.

Holleman, Arnold Frederik, P. Caland, T. van der Linden, and J. P. Wibaut, quantitative investigation of the sul-

phonation of toluene, A., i, 849.

Holleman, Arnold Frederik, J. C.

Hartogs, and T. van der Linden, quantitative investigations on the nitration of aniline, A., i, 364.

Holleman, Arnold Frederik, and I. J. Rinkes, quantitative examination of the introduction of one atom of a halogen into phenol, A., i, 535.

Holmberg, Bror, stereoisomeric dihalogensuccinic acids, A., i, 767.

Holmberg, Otto,holmium, A., 286.

Holmberg, O. J. See Efim Semen London.

Holmes, Arthur, the association of lead with uranium in rock-minerals, and its application to the measurement of geological time, A., ii, 570.

Holmes, W. C., formation of alkaloidal periodides, A., i, 907.

Holt, Alfred, the borie acids, A., ii, 720. Holt, Alfred, and James Eckersley Myers, the phosphoric acids, T., 384; P., 21.

Homans, John. See Francis Gano Benedict.

Homberger, A. W. See William Albert Noyes.

Homer, (Miss) Annie, action of aluminium chloride on benzene, A., i., 276.

chloride on benzene, A., i., 276.

Homma, E. See Josef Habermann.

Honda, I. the alkalaids of the toadst

Honda, J., the alkaloids of the toadstool and "artificial" muscarine, A., i, 807.

Hooker, Donald R., the chemical regulation of vascular tone as studied on the perfused blood-vessels of the frog, A., ii, 904.

Hope, Edward, the condensation of ethyl citraconate with ethyl sodiomalonate; formation of cyclopentanone-4-carboxylic acid; preliminary note, P., 281.

Hope, Edward, and William Henry Perkin, jun., the condensation of ethyl crotonate and ethyl methylacrylate with ethyl cyanoacetate and ethyl bromoacetate; synthesis of γ-methylbutane-αβδ-tricarboxylic acid, and pentane-αβδ-tricarboxylic acid, T., 762; P., 95.

Hope, Edward, and Robert Robinson, synthetical experiments in the group of the isoquinoline alkaloids. Part I. Anhydrocotarninephthalide, T.,

1153; P., 125.

synthetical experiments in the group of the isoquinoline alkaloids. Part II. The constitution of the condensation products of cotarnine and the condensation of cotarnine with aliphatic and aromatic nitro-compounds. T., 2114: P., 265.

pounds, T., 2114; P., 265.

Hopfgartner, Karl, electrolysis of solutions of salts of fatty acids in the corresponding anhydrous acids, A., ii,

849.

Hopkins, Arthur John, the specific gravities of the elements considered in their relation to the periodic system, A., ii, 698.

Hopkins, Frederick Gowland, and Horace Savory, Bence-Jones protein, and the metabolism in three cases of Bence-Jones proteinuria, A., ii, 417.

Hopwood, Arthur, and Charles Weizmann, synthesis of dipeptides of a-aminolauric acid with glycine, alanine, valine, leucine, and asparagine, T., 571; P., 55.

synthesis of polypoptides of α-aminon-nonoic acid with glycine, alanine, valine, leucine, asparagine, and aspartic acid, T., 1577; P., 214.

Horiba, Shinkichi, equilibrium in the system: water, ethyl alcohol and ethyl ether, A., ii, 592.

Horn, Frank R. van, formula of pearceite and of polybasite, A., ii, 807.

Horn, Frank R. van, and C. W. Cook, new occurrence of pearceite, A., ii, 614.

Horn van den Bos, J. L. M. van der, quantitative separation of barium, strontium, and calcium, A., ii, 228.

Horowitz, Stefanie. See Bruno Böttcher.

Horrmann, P. See Otto Stark.

Horton, Frank, a spectroscopic investigation of the nature of the carriers of positive electricity from heated aluminum phosphate, A., ii, 90.

the discharge of positive electricity from sodium phosphate heated in different gases, A., ii, 246.

vacuum tube spectra of mercury. A., ii, 559.

the origin of spectra, A., ii, 677.

Horváth, Béla von, tellurium. I. Action of sulphuryl and thionyl chlorides on tellurium, A., ii, 598.

Hosford, H. H., and Harry Clary Jones, conductivities, temperature-coefficients of conductivity and dissociation of certain electrolytes, A., ii, 960.

Houben, Josef, action of nitrous acid on methyl dimethylanthranilate, A., i,

293.

Housen, Josef, Theodor Arendt, and L. Ettinger, secondary anthranilic acids and the transformation of their nitrosoderivatives into a peculiar class of intensely red substances, soluble in water, A., i, 128.

water, A., i, 128.

Houben, Josef, and Hans Doescher, hydropinenealdehyde and hydropinene-

carboxylic acid, A., i, 61.

Hough, Theodore, variations in the response of healthy men to dyspaceic conditions produced by breathing a confined volume of air, A., ii, 993.

Houlehan, A. E. See Arthur Wesley Browne.

Houstoun, Robert A., the absorption of light by inorganic salts. I. Aqueous solutions of cobalt salts in the infrared, A., ii, 785

the absorption of light by inorganic salts. III. Aqueous solutions of nickel salts in the visible spectrum and the infra-red, A., ii, 785.

Houstoun, Robert A., and John S.
Anderson, the absorption of light by inorganic salts. IV. Aqueous solutions of nickel and cobalt salts in the ultra-violet, A., ii, 786.

ultra-violet, A., ii, 786.

Houstonn Robert A., and Alexander R.

Brown, the absorption of light by inorganic salts. II. Aqueous solutions of cobalt salts in the visible spectrum, A., ii. 785.

Howard, Hubert, and Frank George Pope, indicators of the methyl-red type, T., 1333; P., 206.

Howard, Hubert. See also Frank George Pope.

Howe, Paul E., and Philip Bouvier Hawk, fasting studies. I. Nitrogen partition and physiological resistance as influenced by repeated fasting, A., ii, 304.

Howe, Paul E., H. A. Mattill, and Philip Bouvier Hawk, fasting studies. III. Nitrogen partition of two men through seven-day fasts following the prolonged ingestion of a low protein diet; supplemented by comparative data from the subsequent feeding period, A., ii, 412.

Howland, John, the chemistry and energy dissipation in sleeping child-

ren, A., ii, 1005.

Huber, E. See H. Telle.

Huber, Paul, amounts of substances yielding hydrogen cyanide in some fruit seeds, A., ii, 1022.

composition of pear and apple seeds,

A., ii, 1024. Huber, P. See W. T. Baragiola and $\it Edouard$ Bourgeois.

Hudig, J., and H. Welt, [amount of nitrogen as ammonia and as nitrates in rain-water collected at Uithuizer-

meeden], A., ii, 1128. Hudson, C. S., stereochemical configuration of the sugars fucose and rhodeose,

A., i, 355.

Hübbenet. Elise.See Wladmir I. Palladin.

Hübener, Gerhard, direct estimation of caoutchouc in vulcanised rubber materials, A., ii, 231.

Hübener's caoutchouc tetrabromide, A., ii, 1036.

Hübner, O. See Carl Mannich.

Ernst. See Will-Hüni, Richardstätter.

Huerre, R., cochineal fat, A., i, 766.

Hüttner, Karl. See Franz Mylius.

Huff, William B., typical cases of secondary emanations produced uranium-X, A., ii, 569.

Hug, Ernst. See Richard Willstätter. Hughes, A. Ll., velocities of the electrons produced by ultra-violet light, A., ii, 572.

Hughes, Ernest Chislett, and Arthur Walsh Titherley, 6-bromo-2-phenyldihydro-1:3-benzoxazine-4-one related derivatives, T., 23.

Hughes, Ernest Chislett. See also Arthur Walsh Titherley.

Hughes, Josiah Simpson and James Renwick Withrow, character of silver deposits from various electrolytes, A., ii, 154.

Hulett, George A., mercurous sulphate as depolariser in normal elements, A., ii, 848.

Hulett, George A. See also W. L. Perdue.

Hull, Thomas Ernest. See John Albert Newton Friend.

Hulton, Henry Francis Everard. Julian Levett Baker.

Hundeshagen, Franz, the alkalimetry of magnesium ammonium phosphate and acidimetry of ammonium phosphomolybdate, A., ii, 931.

Hunt, Franklin L., conductivity and ionisation of certain salts at 18° and 25°, A., ii, 688.

Hunt, Franklin L. See also William Crowell Bray.

Hunter, Andrew, and Maurice Hope Givens, allantoin-purine excretion of the monkey, A., ii, 218.

nitrogenous metabolism of the coyote (Canis latrans), A., ii, 303.

Hunter, Andrew. See also Sutherland Simpson.

Hunter, F. W. See Samuel Lawrence Bigelow.

Hunter, William Hammett. See Henry Augustus Torrey.

Hurley, William B. See Edward de Mille Campbell.

Hurtley, William Holdsworth, and William Ord Wootton, the interaction of alloxan and glycine, T., 288; P., 2.

Hussong, Ludwig. See Theodor Curtius. Hutchin, H. W., assay of wolfram concentrate, A., ii, 940.

Hutchinson, Henry Brougham, and Francis S. Marr, changes induced by the addition of carbohydrates to soils, A., ii, 430.

Hutchinson, Henry Brougham, and Norman Harry John Miller, direct assimilation of inorganic and organic forms of nitrogen by higher plants, A., ii, 920.

Huth, M. E. See Daniel Vorlander. Hyde, Alfred William Tovey. Thomas Slater Price.

Hynd, Alexander. See James Colquhoun Irvine.

I.

Ibbotson, Frederick, estimation of nickel

[in german silver], A., ii, 1139. Ibbotson, Frederick, and S. G. Clarke, volumetric estimation of uranium, A., ii, 443.

Iglesias, Enrique, experiments serving to explain the parallelism between the glycogenic function and the antitoxic

function of the liver, A., ii, 757. Iljin, Nikolaus. See Rudolf Ruer. Ilyin, B., proof of the applicability of Boyle's and Gay-Lussac's laws to emulsions, A., ii, 861.

Indra, A. See Edouard Donath.

Inghilleri, Giuseppe, photochemical synthesis of carbohydrates. I. Sorbose, A., i, 354.

chemical action of light, A., i, 709.

Inglis, John Kenneth Harold, the optical properties of compounds containing an asymmetric "quaternary" carbon atom. Part I. The synthesis of β phenyl-\(\beta\)-methylvaleric acid and of as-methylethylsuccinic acid, T., 538; P., 46.

Inouye, Katsuji. See Ernst Cohen and

The Svedberg.

Ipatieff, Wladimir N., catalytic reactions at high temperatures and pressures. XX. Dehydration of cyc ic alcohols, A., i, 25.

catalytic reactions at high temperatures and pressures. XXI. Influence of foreign substances on the activity of catalysts, A., i, 31.

polymerisation of ethylene hydrocarbons at high temperatures and

pressures, A., i, 937.

Ipatieff, Wladimir N., and N. Dowgelewitsch, catalytic reactions at high temperatures and pressures. XXII. Decomposition of hexane and cyclohexane; isomerisation of cyclohexane,

A., i, 937.

Ipatieff, Wladimir N., and Drachussoff, catalytic reactions at high temperatures and pressures. XXII. Reduction

of terpenes, A., i, 137.

Ipatieff, Wladimir N., and W. Werkhowsky, the replacement of metals from aqueous solutions of their salts by hydrogen at high temperatures and pressures. II., A., ii, 716.

Irvine, James Colquhoun, and Alexander Hynd, o-carboxyanilides of the sugars,

T., 161; P., 9.

Irvine, James Colquboun, David Mc-Nicoll, and Alexander Hynd, new derivatives of d-glucosamine. T., 250; P., 23.

Isaac, S. See E. Frank.

Isert, Fritz. See August Michaelis. Ishida, Migaku, and Bernhard Tollens, estimation of pentosans and methylpentosaus in cereals and in wood fungi, A., ii, 645. Isler, Max. See Richard Willstätter.

Issekutz, B. von, the action of morphine, codeine, dionine, and heroine on breathing, A., ii, 1017.

Itallie, Leopold van, and Max Kerbosch, components of opium, A., i, 76.

Iterson, G. van, jun. See (Miss) J. van Amstel.

Iwakawa, K., pharmacological investigations on dicentrine, the aikaloid of Dicentra pusilla, A., ii, 420. "Tagayasan," a Japanese wood the

dust of which causes inflammation,

A.. i, 793.

Iwanoff, Leonid, the question of the oxidation of the products of zymin fermentation during respiration, A., ii. 48.

Iwanoff, Nicolaus, influence of the vapours of formaldehyde, acetaldehyde, and acialdehyde on the organism, A., ii, 419.

the action of useful and harmful stimulators on the respiration of living and killed plants, A., ii,

522.

Iwanoff, W. N., a new method for determining copper in pyrites or burnt

pyrites, A., ii, 660.

Izar, Guido, uric acid formation. VII. (1) Failure of regeneration of uric acid in hunger. (2) Destruction and formaation of uric acid in birds. (3) Uric acid synthesis in mammals and birds,

A., ii, 907.

Izbekoff, W. A., and Wladimir A.

Plotnikoff, aluminium bromide as solvent, A., ii, 493.

J.

Jabłczyński, Kasimir, and St. Jabłoński, reactions in heterogeneous systems. The influence of alcohol, A., ii, 27.

Jabloński, St. See Kasimir Jabiczynski. Jaboin, A., units of measurement of radium and of radioactivity, A., ii, 8. Jaboin, A. See also Haret.

Jaboulay, Emile, estimation of sulphur in steel and iron, A., ii, 654.

Jackson, Charles Loring, and Latham Clarke, curcumin, A., i, 218.

Jackson, Colin Gyrth, the dissociation of cupric bromide and some forms of glass manometer, T., 1066; P., 45. Jackson, Dennis Emerson, and Frank

C. Mann, pharmacological action of

uranium, A., ii, 633.

Jackson, Holmes Condict, changes in blood and muscle following bilateral nephrectomy and double ureteral ligation, A., ii, 409.

Jacob, Hugo, and R. Kaesbohrer, a new method for determining the extent of rusting, A., ii, 896.

Jacobj, Carl, pharmacology of veronal.

III. Action of veronal in reference to its specific paralytic action on the

vessel walls, A., ii, 1120.

Jacobj, Carl, and Carl Roemer, pharmacology of veronal. II. Influence of temperature, breathing, and circulation, A., ii, 1120.

Jacobs, Walter Abraham, and Phæbus A. Levene, inosic acid, A., i, 408.

Jacobs, Walter Abraham. See also Phæbus A. Levene.

Jacobsen, K. A., production of acid and alkali by diphtheria bacilli, A., ii,

Jacobsen, K. A. See also Felix Ehrlich.

Jacobson, Clara. See Anton Julius Carlson.

Jacobson, Conrad. See Emil Goetsch. Jacoby, Ernst. See Ferdinand Blumenthal.

Jacoby, Martin, the reactions between ferments and anti-ferments, A., i, 935.

Jacoby, Richard. See Nikodem Caro. Jäger, Carl [preparation of carbamide

derivatives], A., i, 1027.

Jaeger, Frans Maurits, melting temperatures of sodium and lithium meta-silicates, A., ii, 981. Jäger, Gustav. See Hermann Grossman.

Jänecke, Ernst, the formation of potassium nitrate by double decomposition from the point of view of the phase rule, A., ii, 799.

the ternary system copper—silver—gold, A., ii, 1089.

Jaffé, George, a case of electrolytic satu-

ration current, A., ii, 962.

Jager, L. de, a yellow substance in the urine, A., ii, 58.

Jahn, Friedrich, iron metabolism. The estimation of small amounts of iron, A., ii, 1136.

Jakubowski, Zyg. von, quinoline-5-carboxylic acid. I., A., i, 81.

Jalander, Y. W., the ricinus lipase, A., i, 1053.

James, Charles, thulium. 891.

James, Charles, and L. A. Pratt, a new method for the separation of cerium, A., ii, 935.

James, Charles, and J. E. Robinson, europium, A., ii, 893.

See also L. A. Pratt. James, Charles. James, Thomas Campbell, the \$\beta\$-chlorocinnamic acids, T., 1620; P., 216.

Jansen, Barend Coenraad Petrus, fat metabolism in the absence of the pancreatic juice in the intestine, A., ii, 623.

Jansen, Hans, and Prytz, the bactericidal action of the emanation from radium, A., ii, 321.

Jantsch, Gustav, and A. Ohl, compounds of dysprosium, A., ii, 492.

Jantsch, Gustav, and S. Wigdorow, double nitrates of the rare earths. I. Double nitrates of the rare earths with the alkali metals, A., ii, 114.

Januschke, Hans, and Leo pharmacology of the bronchial muscu-

lature, A., ii, 1120.

Januschke, Hans. See also Richard Chiari.

Jaquerod, Adrien, and M. Tourpaïan, application of the principle of Archimedes to the exact determination of the densities of gases, A., ii, 189.

Jaroschy, Stephan, formation of acyl derivatives of phenylhydrazine in aqueous solution, A., i, 157.

Jaubert, George François, preparation of highly oxygenated salts in a solid condition, A., ii, 489.

Javillier, Maurice, silicotungstates of coniceine, sparteine, and atropine, A., i, 152.

estimation of atropine. Titration of the alkaloids in belladonna extracts, A., ii, 551.

Javillier, Maurice, and B. Guérithault, the crystalline deposit of a certain fluid extract of cinchona bark. The estimation of the quinine alkaloids and quinine silicotungstate, A., ii, 778.

Javillier, Maurice. See also Gabriel Bertrand.

Jeanneret, B. See Max Wunder.

Jelagin, Sergius. See Hermann Staud-

Jeller, Rudolf, calculation of gas analyses, A., ii, 433.

Jellinek, Karl, the preparation of pure hyposulphites and the system hyposulphite-water, A., ii, 278.

[analysis of hyposulphites], A., ii, 331. conductivity and dissociation of sodium hyposulphite and hyposulphurous acid in comparison with analogous sulphur-oxygen compounds. Dissociation of ternary electrolytes, A., ii, 362.

electrolytic potential of hyposulphite reactions, A., ii, 365.

the electrolytic preparation of hyposulphites from solutions of hydrogen sulphites, A., ii, 482.

iron as a catalyst in the synthesis of ammonia under pressure, A., ii, 798.

Jellinek, Karl, the preparation of pure hyposulphites and the system hyposulphite—water, A., ii, 799.

Jentgen, H., cellulose, hydrocellulose,

A., i, 115, 355.

Jeriomin, K. A., formation of graphite in iron alloys, A., ii, 289.

Jesser, Leopold, the formation of minerals during sintering, A., ii, 500.

Jezek, B., braunite from Minas Geraës, Brazil, A., ii, 120.

See Jinendradasa, James Nadoris. Alfred Francis Joseph.

Jo, Inohiko, hydrates of potassium thiosulphates, their solubility, and transition points, A., ii, 723.

Joanin, A. See Alphonse Marc Brissemoret.

Joannovics, Georg, and Ernst Peter Pick, intravital inhibition of oxidation in the liver by narcotics, A., ii, 628.

Job, André, the production of ozone at a low temperature and the continuous measurement of the yield, A., ii, 387.

Job, André, and P. Goissedet, a green, crystalline manganitartrate, A., i, 176.

Jodidi, S. L., chemical nature of organic nitrogen in the soil, A., ii, 820. Jodlbauer, Alb. See F. Duncker.

Jörg, P. See Theodor Zincke.

Jörgensen, Gunner, the estimation of phosphoric acid, A., ii, 437.

estimation of phosphoric acid as magnesium ammonium phosphate, A., ii, 536.

Johlin, Jacob Martin. See Otto Diels. John, E., improvements in receivers for vacuum distillations, A., ii, 876.

Johns, Carl Oscar, purines. II. isomeride of xanthine; 2:8-dioxypurine, A., i, 242.

purines. III. 2-oxy-9-methylpurine and 2:8-dioxy-9 methylpurine, A., i, 506.

Johnson, Frederick M. G., vapour pressures of mercuric chloride, bromide, and iodide, A., ii, 727.

Johnson, Treat Baldwin, sulphur linkings in proteins, A., i, 758.

Treat Baldwin, and Joseph Alfred Ambler, pyrimidines. LII. Thiocytosine-5-carboxylic acid, A., i, 576.

Johnson, Treat Baldwin, Joseph Alfred Ambler, and Harley Taylor Peck, pyrimidines. Ll. Synthesis cytosine-5-acetic acid, A., i, 575.

Johnson, Treat Baldwin, and Robert Bengis, synthesis of pyrrole compounds from imino-acids. N-phenyl-aa'-dicarbethoxy-\$6'-diketopyrrolidine [ethyl 3:4-diketo-1-phenylpyrrolidine-2:5-dicarboxylate], A., i, 564.

Johnson, Treat Baldwin, and Charles Andrew Brautlecht, hydantoins. IV. Reduction of aldehyde condensation products of 2-thio-1-phenylhydantoin, A., i, 813.

Johnson, Treat Baldwin, and Gerald Burnham, sulphur in proteins. Thio-

polypeptides, A., i, 696.

thioamides: formation of thiolpolypeptide derivatives by the action of hydrogen sulphide on aminoacetonitrile, A., i, 712.

Johnson, Treat Baldwin, and Lewis H. Chernoff, benzoylphenylacetamide, A., i, 372.

Johnson, Treat Baldwin, and Arthur Joseph Hill, pyrimidines. L. Condensation of thiocarbamide with esters of allylmalonic acid and some alkylsubstituted allylmalonic acids, A., i, 502.

Johnson, Treat Baldwin, and David Breese Jones, transformation of allylphthalimideinto propenylphthalimide, A., i, 455.

Johnson, Treat Baldwin, and Norman Arthur Shepard, pyrimidines. LIII. Condensation of ethyl formate and ethyl oxalate with some pyrimidine-

thioglycollates, A., i, 924.

Johnson, Treat Baldwin.

Henry Lord Wheeler.

Johnston, John, and L. H. Adams, influence of pressure on the melting point of certain metals, A., ii, 696.

phenomenon of occlusion in precipitates of barium sulphate, and its relation to the exact estimation of sulphates, A., ii, 766.

Jolibois, Pierre, allotropic modifications of arsenic and its melting point, A., ii,

Jolibois, Pierre, and Eugène L. Dupuy, definite compounds of arsenic and tin, A., ii, 612.

Jolles, Adolf [F.], the degradation of the

sugar group, A., i, 15. the action of ammonia and sodium carbonate on different varieties of sugar in dilute aqueous solutions, A., i, 421.

the destruction of dextrose by light, A., i, 524.

a new method of obtaining glycuronic acid, A., i, 709.

the behaviour of invert sugar in alkaline solution in presence of hydrogen peroxide, A., i, 951.

new method for the quantitative estimation of sucrose in the presence of other sugars, A., ii, 74.

Joly, John, a method of investigating the quantity of radium in rocks and

minerals, etc., A., ii, 685.

Joly, John, and Louis B. Smyth, the

amount of radium emanation in the soil and its escape into the atmosphere, A., ii, 1048.

Jona, Temistocle, index of oxidation of milk, A., ii, 233.

new method of estimating the lactose

and fat in milk, A., ii, 234. Jona, Temistocle, and G. B. chloroguaiacols, A., i, 854. Pozzi,

Jones, Cecil Price, changes in blood and bone-marrow produced by hæmorrhage and blood-destruction, A., ii, 995.

Jones, Charles Owen, the action of certain sulphur compounds on metabolism and excretion, A., ii, 742.

the action of selenium salts on red blood-corpuscles, A., ii, 1108.

Jones, David Breese. See Treat Baldwin Johnson.

Jones, Harry Clary, and W. W. Strong. absorption spectra of certain salts of cobalt, erbium, neodymium, and uranium as affected by temperature and by chemical reagents. II., A., ii, 166.

selective oxidation. XXXIII., A., ii,

Jones, Harry Clary. See also J. Sam Guy, H. H. Hosford, Henry R. Kreider, Augustus Price West, E. P. Wightman, and L. G. Winston.

Jones, Herbert Edwin. See David Leonard Chapman.

Jones, Humphrey Owen, and Percy Edwin Evans, the mechanism of Doebner and von Miller's quinaldine synthesis, T., 334; P., 43.

Jones, Humphrey Owen. See also William Gidley Emmett and Charles

Stanley Robinson.

Jones, Walter, nucleases, A., i, 410. the physiological agents concerned in nuclein fermentation, with special reference to four independent de-

amidases, A., i, 410.

Jones, Walter. See also Samuel Amberg and George de Forest Barnett.

Jones, William Jacob, the determination of solubility coefficients by aspiration, T., 392; P. 21.

Jones, William Jacob, and Arthur Lapworth, the influence of temperature on the basic water value of ethyl alcohol, T., 917; P., 100.

equilibrium in the system: ethylalcohol, acetic acid, ethyl acetate and water, and its apparent displacement by hydrogen chloride, T., 1427; P., 143. Jones, William Jacob, and Arthur Lapworth, the heat of hydrolysis of ethyl alcohol hydrochloride: a correction, P., 143.

Jong, Anne Willem Karel de, action of sunlight on allo-cinnamic acid, A., i, 639

assay of coca leaves, A., ii, 552.

Jonker, Willem Peter Andries, colloidal chemistry and the phase rule, A., ii,

Jordan, Anson, action of urinary antiseptics, A., ii, 218.

Jordan, H. E. See J. A. E. Eyster. Jordis, Eduard [Friedrich Alexander], chemistry of colloids, A., ii, 377.

Jorissen, Armand, identification veronal, A., ii, 670.

a reaction of sparteine, A., ii, 1144.

Jorissen, Willem Paulinus, corrosion of copper and iron alloys by water containing salt and air; oxidation of copper at high temperatures, A., ii, 41.

Jorissen, Willem Paulinus, and Adriaan Peter Herman Trivelli, metallic uranium, A., ii, 207.

Joseph, Alfred Francis, action of bromine on formic acid, A., ii, 384.

Joseph, Alfred Francis, and James Nadoris Jinendradasa, the colour and constitution of bromine solutions, T., 274.

Joseph, Don R., and Samuel James Meltzer, the inhibitory influence of magnesium on the direct excitability of frog's muscle, and the antagonistic effects of sodium and calcium on this influence, A., ii, 55.

Jouguet, indifferent points, A., ii, 869. Joyner, Reginald Arthur, amalgams containing silver and tin, T., 195;

P., 5.

Judd, Roy C. See James H. Walton, jun. Jürgens, Boris. See Wilhelm Steinkopf. Jürgens, Heinrich. See Gustav Heller. Jürgensen, E. See Sören Peter Lauritz

Jüttner, Ferencz, dynamics of a gas in motion according to the theory of relativity, A., ii, 579.

general integrals of chemical kinetics, A., ii, 972.

Julius, W. H., and B. J. van der Plaats, anomalous dispersion of light in gases, A., ii, 449.

Jung, A., influence of thermal treatment on the properties and structure of hypereutectoid steel, A., ii, 898.

Jungjohann, Wilhelm, the emission and absorption of luminous gases from experiments with continuous currents of high intensity, A., ii, 82.

Junkersdorf, Peter, the formation of carbohydrates from fat in the animal organism, A., ii, 127.

Juschtschenko, A. J., the nuclease content of different organs of man and animals, A., ii, 412.

the thyroid and enzymatic processes, A., ii, 1112.

Just, Gerhard, and Yrjö Kauko, kinetic investigation of the action of hydrogen on solutions of potassium permanganate (auto-reduction), A., ii, 494.

Just, Gerhard. See also Fritz Haber.

K.

Kämpf, E. See Emil Abderhalden. **Kaempf**, F., fluorescence absorption and Lambert's absorption law in the case

of fluorescein, A., ii, 833.

Kaesbohrer, R. See Hugo Jacob.

Kahlenberg, Louis, and David Klein, reaction between sodium and mercury, A., ii, 723.

Kahn, Richard H., and Emil Starkenstein, behaviour of glycogen after extirpation of the suprarenal capsules, A., ii, 415.

Kailan, Anton, specific gravity of absolute ethyl alcohol at 25°, A., i, 939.

Kakiuchi, Samuro, estimation of fat in pathological urine, A., ii, 549.

Kalb, Ludwig, dehydroindigotin. III. Decomposition by means of acids and alkalis, A., i, 680.

Kalecsinszky, Alexander von, analyses of Hungarian minerals, A., ii, 47.

Kallauner, O., estimation of magnesium

as oxide, A., ii, 1032. Kallauner, O. See also Joseph Hanuš. Kalle & Co., preparation of a nitro-genous oxidation product of ace-

naphthene, A., i, 309. preparation of 8-aminopurine deriva-

tives, A., i, 507.

preparation of sulphonated naphthalene derivatives, A., i, 627.

preparation of 6-amino-α-naphthol-5sulphonic acid, A., i, 630.

preparation of alkyloxy- and alkylthioderivatives of 3-hydroxy-(1)-thionaphthen-2-carboxylic acid, A., i, 666.

preparation of thionaphthen derivatives, A., i, 667.

preparation of thiazole compounds of "thioindigo reds" and their de-

rivatives, A., i, 678. [preparation of dichloro-o-carboxyphenylthiolacetic acid, A., i, 871. [preparation of carbazole derivatives], A., i, 917.

Kalle & Co., preparation of amino- and alkylamino-substituted (in the aryl group) derivatives of 3-oxy-(1)-thionaphthen 2 carboxylic acids and of 3-oxy-(1)-thionaphthen, A., i, 1009.

Kalmus, Ernst, compounds of pyridine

in blood-pigment, A., i, 95.

Kalning, Harald. See Hans Stobbe. Kanitz, Aristides, the dissociation constants of tryptophan, A., i, 97.

Kantor, J. L., and William John Gies, new microscopic test for free acid, A., ii, 446.

experiments with the biuret reagent [detection of protein, etc.], A., ii, 554.

Kappelmeier, Paul. See Kurt H. Meyer and Heinrich Wieland.

Kappen, Hubert, analysis of "nitrolime." A., ii, 933.

Theodor, the antagonistic Karaúlow, action of cholesterol to the glucosidic heart poisons as determined by investigations on the isolated frog's heart, A., ii, 517.

Karauschanoff, S., the significance of dihydroxyacetone as an intermediate product of alcoholic fermentation, A., ii, 914.

Karczag, Laszló. See Carl Neuberg.

Karl, A. See Carl Paal.
Karman, Theodor von, the turbulence viscosity of different liquids, A., ii, 469.

Kaserer, Hermann, and Ignaz K. Greisenegger, estimation of phosphoric acid in soils and crops, A., ii, 152.

Kasper, Franz Joseph, measurements in the silver spectrum, A., ii, 831. Kassel, R. See Karl Drucker.

Kassner, Georg, oxidation of lead oxide in presence of light and air, A., ii, 284.

Kast, Hermann, chlorination of a-naphthol, A., i, 439.

the metallic salts of trinitrophenols and trinitrocresols, A., i, 852.

Kastle, Joseph Hoeing, preparation of certain sulphonic acids in the free state, A., i, 30.

study of o-amino-p-sulphobenzoic acid with special reference to its fluor-

escence, A., i, 200.

conversion of benzenesulphondibromoamide into dibromobenzenesulphonamide by means of concentrated sulphuric acid, A., i, 361.

several acids suitable for use as standards in acidimetry, A., ii, 66.

experimental illustration of the law of definite proportions through combination of the halogens with finelydivided silver, A., ii, 481.

JosephHoeing, and EliasKastle. Elvove, magenta-S as a permanent standard for the estimation of nitrites in water analysis, A., ii, 437.

Kastle, Joseph Hoeing, and R. L. Haden, o-amino-p-sulphobenzoic acid and its derivatives. with special reference to their fluorescence. II., A., i, 974.

colour changes occurring in the blue flowers of the wild chicory, Cichorium intybus, A., ii, 1023.

Kastle, Joseph Hoeing. See also J. G. Dinwiddie.

Kastner, Richard. See Theodor Curtius. Katz, J. R., the analogy between swelling (imbibition) and mixing. A., ii, 475.

the analogy between swelling (imbibition) and mixing. II. Swelling and (imbibing) crystals mixedcrystals, A., ii, 475.

Katz, Julius, volumetric estimation of quinine in drugs, etc., A., ii, 79.

the excretion of quinine by the dog, and a new method for the estimation of this alkaloid, A., ii, 1013.

Kauffmann, Hugo [Josef], and W. Kugel, 4-nitroresorcinol, A., i, 368. distribution of auxochromes in azo-

compounds, A., i, 930.

Kauffmann, Max, the behaviour of indole in the human organism, A., ii, 420. choline in ox-brain, A., ii, 1005.

Kaufmann, Adolf, Alberto Albertini,

and Robert Widmer, cyanodihydrocyclic amines. III., A., i, 750.

Kaufmann, Adolf, and J. M. Plá y Janini, constitution of the ψ-bases of

quinoline. II., A., i, 915.

Kaufmann, Adolf, and Paul Strübin, constitution of the pseudo-ammonium bases, A., i, 321.

Kaufmann, Adolf, Paul Strübin, A.
Anastachewitz, N. Popper, and L.
Sznajder, quinoline dyes. I. apoCyanines, A., i, 328.

Kaufmann, Adolf, Robert Widmer, and Alberto Albertini, cyanodihydrocyclic amines. IV. Synthesis of cinchonic acid, A., i, 749.

Kaufmann, Adolf. See also Herman Decker.

Kauko, Yrjö. See Gerhard Just.

Kautzsch, Karl. See Emil Aberhalden, and Hans Stobbe.

Kawashima, K. See Theodor Brugsch. Kayser, E., the juice of beer yeast, A., ii, 421, 640.

the greasiness ("graisse") of ciders, A., ii, 648.

influence of humates on micro-organisms, A., ii, 759.

Kayser, Heinrich, normals from the arc spectrum of iron in the international system, A., ii, 166. spectroscopy of oxygen, A., ii, 237,

785.

Kaysser, August, estimation of manganese in steel by the Volhard-Wolff method, A., ii, 70. assay of bog ores, A., ii, 229.

Kazanecky, P., zinc peroxide, A., ii,

Kazay, Endre von, influence of water on the rotatory power of camphor solutions, A., i, 892.

Keane, Charles Alexander. Gordon Francis.

Keegan, P. Q., plant chemistry, A., ii, 917.

Keesom, W. H., spectro-photometric investigation of the opalescence of a simple substance in the neighbourhood of the critical condition, A., ii, 787.

Kehrmann, Friedrich, the two forms of o-benzoquinone, A., i, 883.

Kehrmann, Friedrich, and L. Löwy, 5-aminophenazoxonium salts, A., i, 1033.

Kehrmann, Friedrich, and A. Masslenikoff, third isomeride of aposafranine, A., i, 927.

Kehrmann, Friedrich, and José Riera y Punti, isomeride of aposafranine and the third isomeride of phenosafranine, A., i, 926.

synthesis of naphthaphenazine derivatives, A., i, 927.

Kehrmann, Friedrich, and J. Steinberg, 3:5-diaminophenazthionium

tives, A., i, 1034. Keimatsu, S., soya bean oil, A., i, 766. Keiser, Edward Harrison, and J. J. Kessler, nitrile of fumaric acid, A., i,

Keiser, Edward Harrison, and Le Roy McMaster, synthesis of fumaric and maleic acids from the acetylene di-

iodides, A., i, 949.

Kelber, C., and A. Schwarz, action of carbon disulphide and potassium hydroxide on p-tolyl methyl ketone and a-thienyl methyl ketone, A., i, 740.

Keller, Harry F., a new variety of chrysocolla from Chile, A., ii, 1104.

Keller, Oskar, alkaloids of ipecacuanha root, A., i, 1014.

Kelley, George Leslie. See Theodore William Richards.

Kemmerer, George, the electrolytic estimation of zinc in ores, A., ii, 335.

Kempf, J. See Theodor Zincke.

Kempf, Richard, electrolytic oxidation of p-benzoquinone, A., i, 464.

Kempf, Richard, automatic extraction of aqueous liquids by organic solvents of lower density, A., ii, 106.

Kendall, James, the ionic solubility pro-

duct, A., ii, 474.

Kennaway, Laurence. ErnestSee Albrecht Kossel.

Kenner, James, and (Miss) Emily Gertrude Turner, formation of six- and seven-membered rings from derivatives of 2:2'-ditolyl, T., 2101; P., 262. a synthesis of phenanthrene, P., 92.

Kenyon, Joseph. See Robert Howson Pickard.

Kepinoff, L., the influence of the bloodcorpuscle lipoids on the blood formation, A., ii, 125.

Kerbosch, Max. See Leopold van Itallie. Kereszty, Georg von. See Franz Tangl. Kerkovius, W. See Hans Rupe.

Kernbaum, Miroslaw, decomposition of

water by metals, A., ii, 716. Kernot, Giuseppe, and Francesco Pietrafesa, rate of reaction between potassium dichromate and iodide in the presence of hydrochloric acid and of

catalysts, A., ii, 383. Kertess, Ernst. See Franz Knoop.

Kesselring. See Rudolf Nietzki. Kessler, J. J. See Edward Harrison Keiser.

Ketner, C. H., solubility of sodium carbonate, A., ii, 603.

Kielbasiniski, St. See Paul Friedländer. Kiesel, Alexander, enzymic degradation of arginine in plants, A., ii, 1124.

Kiesewetter, Karl. See Emil Abderhalden.

Kietreiber, Franz, analysis of tin alloys, A., ii, 158.

Kijner, Nikolai M., transformations of cyclobutyldimethylcarbinol. A., i, 42.

diphenylcyclobutylcarbinol and its transformations, A., i, 43.

production of β -benzopinacolin, A., i,

action of hydrazine hydrate on thujone, A., i, 71.

action of the chloroanhydride of cyclopropanecarboxylic acid on benzene in presence of aluminium chloride, A., i, 989.

transformations of thujane, A., i, 996. catalytic decomposition of alkylidenehydrazines. II., A., i, 1027.

Kijner, Nicolai M., W. Amosoff, and S. Voznesensky, transformations of cyclo-

butyldiethylcarbinol, A., i, 967.

Kijner, Nicolai M., and S. Beloff, action of hydrazine hydrate on cyclohexanone, **A**., i, 678.

Kijner, Nicolai M., and W. Klawikordoff, transformations of cyclopropyldimethylcarbinol, A., i, 635.

Kijner, Nicolai M., and A. Proskurja-

koff, catalytic decomposition of alkylidenehydrazines as a method of obtaining hydrocarbons, A., i, 679.

Kijner, Nicolai M., and A. Zavadovsky, decomposition of alkylidenehydrazines; conversion of pulegone into a bicyclic hydrocarbon, C₁₀H₁₈, A., i. 1028.

Kikkoji, T., the degradation of the naphthalene ring in the animal body, A., ii, 909.

Kilchling, K. See Johann Georg Koenigsberger.

Kiliani, Heinrich, saccharinic acids, A., i, 111.

milk sap of Antiaris toxicaria, A., i,

digitonin, digitogenic acid, and their oxidation products, A., i, 139.

See Matti Kilpi, Sulo. Herman Palomaa.

Kimura, H., oil of Thea sasanqua, A., i, 388.

Kindscher, Erich. See Friedrich Willy Hinrichsen.

King, Harold, chlorination of α-naphthol by acetylchloroamino-2:4-dichlorobenzene, P., 266.

King, Harold, and Kennedy Joseph Previté Orton, chlorination of acylanilides; effect of the constitution of the acyl group on the proportion of the ortho- and para-derivatives, T., 1377; P., 196.

King, Harold. See also Kennedy Joseph *Previté* Orton

King, V. L. See Alfred Werner.

Kinoshita, Tosaku, the occurrence and quantitative estimation of trimethylamine in human urine, A., ii, 343.

Kipping, Frederic Stanley, derivatives of silicoethane and silicoethylene, P.,

Kipping, Frederic Stanley, and Frederick Challenger, the resolution of asymmetrical derivatives of phosphoric

acid, T., 626; P., 66.
Kipping, Frederic Stanley, and John Edward Hackford, organic derivatives of silicon. Part XIV. The preparation of tertiary silicols, T., 138; P., 8.

Kipping, Frederic Harold Davies. Frederic Stanley.

Kiréeff, I. See Leo A. Tschugaeff.

Kirkby, P. J., theory of the chemical action of the electric discharge in electrolytic gas, A., ii, 462.

Kirmreuther, Heinrich, dichloro-disulphaminoplato-salts; the stereoisomerism of platinum and the transformation of sulphamic acid, A., ii, 1098.

Kirmreuther, Heinrich. See also Karl Andreas Hofmann.

Kirner, J., the influence of nitrogen in the case-hardening of steel, A., ii, 494.

Kirpal, Alfred, betaine formation and steric hindrance, A., i, 156.

Kirschner, Aage, monohydrate of barium chloride A., ii, 396.

Kissling, Richard, estimation of nicotine in concentrated tobacco juice, A., ii, 344, 345.

Kistiakowsky, Wladimir A., the passivity of metals, A., ii, 401.

Kjellin, F. A., the theory of electrolytic dissociation, taking into account the electrical energy of the ions, A., ii, 248.

Klapproth, W., analysis of lactic acid, A., ii, 1038.

Klason, Peter, valuation of turpentine oils, A., ii, 665.

Klason, Peter, and Bror Segerfelt, chemical processes occurring in the preparation of cellulose by the sulphate method, A., i, 264.

Klawikordoff, See Nicolai M. Kijner.

Klee, Walter. See Johannes Gadamer. See Ed. Stadler. Kleeman, H.

Kleeman, Richard Daniel, the attraction constant of a molecule of a substance and its chemical properties, A., ii, 34.

determinations of the law of chemical attractions between atoms from physical data, A., ii, 97.

relations between the density, temperature, and pressure of substances, A., ii, 257.

the heat of mixture of substances and the relative distribution of molecules in the mixture, A., ii, 371.

molecular attraction and the properties of liquids, A., ii, 966.

Klein, A. A. See Hermon C. Cooper.

Klein, David, influence of organic liquids on the interaction of hydrogen sulphide and sulphur dioxide, A., ii, 200.

apparatus for the estimation of aminogroups, A., ii, 1143.

Klein, David. See also Louis Kahlen-

berg. Klein, Frederick, some new tests, A., ii,

rapid estimation of sulphuric acid with the porous clay crucible, A., ii, 822.

Klein, H. A., and Adolf Magnus-Levy the resorption of cholesterol and cholesteryl esters, A., ii, 57.

Kleinstuck, M., estimation of fluorine [in silicates], A., ii, 1026.

Kleist, Georg, analysis of aluminium

and its alloys, A., ii, 772. Klemenc, Alfons, 3:4:5-trinitroveratrole, A., i, 779.

Klemenc, Alfons. See also Rudolf Wegscheider

Klemensiewicz, Z., the formation of positive ions by heated metals, A., ii, 1050.

Klever, Helmut William. See Hermann Staudinger.

Kliegl, Alfred, and Karl Haas, oo'-dinitrotolane, A., i, 433.

Klimenko, D., action of magnesium on a mixture of allyl bromide and benzaldehyde; synthesis of phenylallylcarbinol, A., i, 444.

Klimont, Isidor, refractive constants of vegetable oils, A., ii, 234.

Klinckhard, Theodor. Behrend.

Kling, André, influence of catalysts in determinations of vapour density, A., ii, 371.

racemic acid as an analytical reagent, A., ii, 539.

estimation of tartaric acid in tartrates and wines by precipitation as calcium racemate, A., ii, 666.

See also Kling, André. Maurice Hanriot.

Kling, M. See A. Halenke.

Klingemann, Wilhelm. See Emil Abderhalden.

Klinger, Heinrich, and Walter Roerdansz, syntheses by means of sunlight, A., i, 63**3.**

Klobb, [Constant] Timothée, dextrorotatory phytosterols of Anthemis nobilis (anthesterols), A., i, 199.

Klobb, Timothée, R. Ehrwein, and J.

Garnier, l-phytosterols. II., A., i, 972.

Klöcker, Alb, the detection of small quantities of alcohol in fermenting liquids, A., ii, 941.

Klooster, H. S. van, fusions of alkali metaborates and metaphosphates,

A., ii, 110.

the binary systems: Li₂O—SiO₂,
Li₂SiO₃—ZnSiO₃, ZnSiO₃—CdSiO₃,
Li₂SiO₃—LiBO₂, Na₂SiO₃—NaBO₃,
and Na₃SiO₃—Na₂WO₄, A., ii, 111. Kloppe, K. See Johannes Scheiber.

Klotz, Oskar, and M. F. Manning, fatty streaks in the tunica intima of arteries, A., ii, 1112.

Knecht, Edmund, decolorising action of various forms of charcoal, A., ii,

Knecht, Edmund, and John Allan, cotton wax, A., ii, 645.

Knecht, Edmund, and Frederick William volumetric estimation of Atack, molybdenum, A., ii, 337.

Knecht, Edmund, and (Miss) Eva Hibbert, titanium chloride in volumetric analysis. IV. Estimation of quinones, A., ii, 76.

pertitanic acid and its influence on the volumetric estimation of iron in titaniferous minerals, A., ii, 544.

Knecht, Ernest. See Fritz Ullmann.

Kneip, A., estimation of cantharidin in cantharides and its tincture, A., ii, 669.

Knight, Luther. See William Albert Noyes.

William Arthur, and (Miss) Knight, Elizabeth Mary Rich, isomeric chromous chlorides, T., 87.

Knoblauch, Adolph Heinrich. See Karl Bernhard Lehmann.

Knöffler, Georg. See Robert Pschorr.

Knöpfer, Gustav, mutual replacement of azines and semicarbazones, A., i, 1033.

Knoll & Co., preparation of 4-isovalerylamino-1-phenyl-2 3-dimethyl-5-pyrazolone and of 4-a-bromoisovalerylamino-1-phenyl-2:3-dimethyl-5-pyrazolone, A., i, 166.

preparation of organic iodo-compounds from the corresponding chloro- and bromo-derivatives by the action of alkali iodides, A., i, 432.

preparation of compounds from the interaction of cotarnine on amides,

imides, or ureides, A., i, 670.

Knoop, Franz, and Ernst Kertess, behaviour of a-amino- and a-ketonic acids in animals, A., ii, 514.

Knorr, Angelo, constitution of quinhydrone-like substances, A., i, 654.

Knorr, Ludwig, and Hermann Fischer, studies on tautomerism. V. Enolic forms of methyl benzoylacetate and acetylacetone, A., i, 976.

Knorr, Ludwig, and Kurt Hess, synthesis of 2:4-dimethyl- 3-ethylpyrrole, a contribution to the question of the constitution of hæmopyrrole, A., i, 1019.

Knorr, Ludwig, and Paul Roth, methyl ether of codeine and its behaviour on exhaustive methylation. XII., A., i, 1014. Morphine.

Knorr, Ludwig, O. Rothe, and H. Averbeck, studies on tautomerism. Desmotropy of acetoacetic ester, A., i, 516.

Knorr, Ludwig, and H. Schubert, studies tautomerism. VI. Colorimetric method for the estimation of enols in allelotropic mixtures, A., i, 948.

Knudsen, Martin, thermal molecular pressure of gases in tubes, A., ii, 188. the molecular heat conduction of gases and the accommodation coefficient, A., ii, 368.

Kobayashi, Matsusuke, the alloys of tellurium with cadmium and tin, A., ii, 40.

the alloys of tellurium with zinc, A., ii, 1089.

Kober, Philip Adolph, a method for the study of proteoclastic enzymes, A., i,

Kober, Philip Adolph, and J. Theodore Marshall, phenolphthalein and its colourless salts, A., i, 300.

preparation of tribasic phenolphthalates, A., i, 984.

Kobert, Rudolph, saponins, A., i, 898. **Koch**, Alfred, production of nitrates in arable soils, A., ii, 922.

action of ether and carbon disulphide on higher and lower plants, A., ii, 1124.

Koch, E. See K. Lendrich.

Koch, Franz. See Alfred Wohl. Koch, Fred C., histidine in pig's thyreoglobulin, A., i, 407.

Koch, Hermann, absorption spectrum of aniline in the ultra-violet, A., ii, 786.

Koch, P. See Leo Tschugaeff.

Koch, Waldemar, sulphur compounds of the nervous system. II. A sulphatide from nerve substance, A., ii, 129.

Kochmann, Martin, the dependence of calcium metabolism on the organic constituents of the food in a grown dog, with some observations on phosphoric acid and magnesium metabolism, A., ii, 410.
the influence of the various compo-

nents of diet and of the ingestion of various iron preparations on iron metabolism, A., ii, 1004.

Kochmann, Martin, and Ernst Petzsch, the dependence of calcium metabolism on the organic constituents of the food in a grown dog, with some observations on phosphoric acid and magnesium II. and III., A., ii, 506. metabolism.

Koefoed, R., remarks of the iodometric titration of acids and Kjeldahl's nitro-

gen estimation, A., ii, 67.

Koehler, Fritz C., the [physiological] action of phenolphthalein, A., ii, 515.

Köhler, John, chemical investigation of resin from the pine (Picea excelsa II. Lævo-pimaric acid, A., i, 295

Köhres, Georg. See Erich Beschke.

Koelker, Arthur Heinrich, d-a-aminobutyric acid and l-α-aminobutyrylglycine, A., i, 773.

Koelker, Arthur Heinrich, and J. Morris Slemons, the amino-acids in the mature human placenta, A., ii, 746.

König, Josef, Julius Hasenbaumer, and

C. Hassler, estimation of colloids in arable soil, A., ii, 1033.

König, Josef. See also W. Greifenhagen.
Koenig, Paul, employment of chromium salts for combating plague, A., ii, 311.

an organic reagent for chromium, A., ii, 337.

the stimulative and toxic effects of various chromium compounds on plants, A., ii, 524.

König, Walter, pseudo-bases of the pyridine series, A., i, 485. the reactivity of the β-unsubstituted

pyrrole ring, A., i, 808. König, Walter, and R. Bayer, rupture of the pyridine ring, A., i, 399.

Köenig, Wilhelm, estimation of nicotine in tobacco extracts, A., ii, 672, 1143.

Koenigsberger, Johann Georg, the atomic heats of the elements, A., ii, 580.

Koenigsberger, Johann Georg, and K. Kilchling, canal rays, A., ii, 88.

Koenigsberger, Johann Georg, and J. the thermoelectric (thermoelectric forces, Thomson effect) and the thermal conductivity of certain elements and compounds and the experimental examination of the electron theories, A., ii, 578.

Köpke, H. See Richard Escales.

Körber, Friedrich, influence of pressure and temperature on the electrolytic conductivity of solutions, A., ii, 863.

Körosy, Kornél von, radioactivity and ferment action, A., ii, 9.

Köster, J., deposition of metallic chromium in the electrolytic estimation of manganese by Engel's method, A., ii, 230.

Kötz, [Friedrich] Arthur, and Erwin Anger, o-menthene-5-one, A., i, 309.

Kötz, Arthur, and Richard Rosenbusch, constitution of tropilen, A., i, 318.

Kötz, Arthur, and H. Steinhorst, halo-genated alicyclic ketones. I. Mono-halogenides of cyclohexanones, A., i, 210.

Kohler, Elmer Peter, unsaturated δ-ketonic acids, A., i, 984.

Kohler, Elmer Peter, Gertrude L. Heritage, and A. L. Macleod, reaction between unsaturated compounds and organic zinc compounds. II., A., i, 862. Kohler, Rudolf, quadriurates, A., i, 243,

Kohlman, Curt. See Hans Stobbe.

[Johannes]Kohlschütter, Volkmar, chemical action of canal rays, A., ii,

Kohlschütter, Volkmar, and P. Sazanoff. metal-nitroso-compounds, A., ii, 730.

Kohn, Franz. See Arthur Rosenheim. Kohn-Abrest, Emile, new applications of

amalgamated aluminium in analyses, A., ii, 673.

Kohnstamm, Philipp, vapour pressures of binary mixtures in the light of van der Waals' theory. II., A., ii, 93.

Kohnstamm, Philipp, and J. Chr. Reeders, phenomena of condensation for mixtures of carbonic acid and nitrobenzene in connexion with double retrograde condensation, A., ii, 1077.

Kohnstamm, Philipp, and Jean Timmermans, vapour pressures in binary systems with partial miscibility of the liq**ui**ds, A., ii, 370.

Kojo, Kenji, differences in the urine of health and carcinoma, A., ii, 909. chemistry of the hen's egg, A., ii, 1110.

Kolb, R., comparison of anhydrite, celestine, barytes, and anglesite in respect to the change of their geometrical and optical characters with temperature, A., ii, 295.

Kolb, R. See also Fritz Renne. Kollisch, Anton. See Otto Diels.

Kolossovsky, Nicholas de, influence of dissolved salts on the distribution of a substance between two solvents, A., ii, 591.

law of moduli in the variation of the coefficient of distribution, A., ii, 705.

Komatsu, Shigeru, synthesis of thiohydantoin, A., i, 683.

Komatsu, Shigeru. See also Mitsuru Kuhara.

Komnenos, Telemachos, interchange of alkyl groups in acid esters, A., i, 260.

Komp, Rudolf, the green carbon band $\gamma = 5635$, A., ii, 1041.

Komppa, Gustav, synthesis of camphoric acid, T., 29.

oxidation of camphene, A., i, 388.

complete synthesis of pinophanic acid and the constitution of ketopinic and tricyclenic acid, A., i, 642. Komppa, Gustav, and O. Routala, com-

plete synthesis of ethylapocamphoric acid, A., i, 381.

Kon, N. See Hermann Staudinger. Kondakoff, Iwan L., santene and its hydrohalides, A., i, 998.

Kondakoff, Iwan L., and I. Schindel-meiser, isolaurolene, A., i, 998. Kondo, H., allyloxanthranol and some

of its derivatives, A., i, 67. Konek-Norwall, Fritz von, thio-derivatives of homoantipyrine, A., i, 505.

Koning, D. A. Wittop. See Jacob Böeseken.

Konjukoff-Dobrynia, P. See A. Sement-

Konowaloff, Iwan, calcium requirements of plants. Different relations of the calcium and magnesium in nutritive solutions, A., ii, 222.

Konowaloff, W. See Wladimir W.

Tschelinzeff.

Konschegg, Artur, the reaction between humin and potassium hypobromite, A., i, 18.

Konstaninoff, N. S., and Wladimir A. Smirnoff, alloys of tin and antimony, A., ii, 1096.

Koolman, F. C. ten Doornkaat, two new forms of apparatus for extraction of liquids with organic solvents, A., ii, 877.

Kooper, W. D. See August Hesse and Richard Otto.

Kopenhague, R., new test paper for the volumetric estimation of zinc [with sodium sulphide], A., ii, 155.

See Fritz VII-Kopetschni, Eduard. mann.

Koppe, Paul. See Erich Müller.

Korczynski, Antoni, nitrophenol salts, A., i, 276.

Koref, F., measurements of specific heat at low temperatures with the copper calorimeter, A., ii, 964.

Korjukin, N. D., action of magnesium on a mixture of allyl bromide and

piperonal, A., i, 445.

Korndoerfer, A., inversion of sucrose by bees, A., ii, 1008.

Korneck, Otto, analytical methods employed in the estimation of caoutchouc. The estimation of caoutchouc as tetrabromide, A., ii, 545. Korsakoff, Marie. S

See Wladimir I. Palladin.

Korschun, Georg, and C. Roll, interaction of ethyl diacetylbutyrate and

hydrazine, A., i, 502.

Korte, Reinhold, quantitative analysis of German silver and similar alloys, A., ii, 155.

Koss, A. K., presence of cholesterol in petroleum, A., i, 761.

Borislav ozokerite, A., i, 761.

Kossel, Albrecht, and Ernest Laurence Kennaway, nitroclupeine, A., i, 667.

Kostalek, John A. See Richard Sidney Curtiss.

Yashiro, Kotake, the behaviour of p-hydroxyphenyl-lactic acid and p-hydroxyphenylpyruvic acid in the

animal body, A., ii, 59.

Kotake, Yashiro. See also Alexander

Ellinger.

Kovářik, Alois F., the half-period of actinium-C, A., ii, 173. Kovářik, Alois F., and C. Zakrzewski,

the influence of changes of temperature and pressure in gases on the movement of the ions shown by ultra-violet light, A., ii, 572.

Kovářik, Alois F. See also Hans

Geiger.

Kowalski, Joseph de, and J. de Dzierzbicki, spectrum of progressive phosphorescence of organic compounds at low temperatures, A., ii, 3.

influence of substituent groups on the spectrum of progressive phosphorescence, A., ii, 84.

Kowarski, S. See Otto Kym.

Kozak, J. See Ludwik Bruner.

Kozlowski, St., a new spectro-colorimetric method of estimating indican in the urine, A., ii, 553.

Kraft, F., glucosides from the leaves of

Digitalis purpurea, A., i, 734. Kraft, F. See also Hartwig Franzen, and Rudolf Weissgerber.

Kramer, S. P., the function of the choroid glands and its relation to the toxicity of cerebro-spinal fluid, A., ii, 1006.

Krampera, J. See Julius Toth.

Krapf, Hermann. See Max Busch. Krasnoselskaya, T. See O. Walter.

Krasser, J. M., estimation of phosphoric acid by Neumann's method, A., ii,

Krause, R. A., the urine of women under normal conditions, with special reference to the presence of creatine, A., ii, 1116.

Krause, R. A., and Wilhelm Cramer, sex and metabolism, A., ii, 752.

Krause, R. L. See Erich Ebler.

Krauskopf, Francis Craig, action of the oxides of lead on potassium tartrate, A., i, 519.

Krausz, Moritz, reversibility of the enzymatic action of castor oil seeds, A., ii, 526.

See Emil Votoček. Krauz, Cyrill.

Krauze, \tilde{L} ., iodine derivatives of strychnine, brucine, and some other alkaloids, A., i, 1016.

Krauze, L. See also Józef Buraczewski. Krebs, Paul. See Heinrich Biltz.

Kreider, Henry R., and Harry Clary Jones, dissociation of electrolytes in non-aqueous solvents as determined by the conductivity and boiling-point methods, A., ii, 362.

Kreidl, Alois, and Emil Lenk, estimation of the specific gravity of very small quantities of milk, A., ii, 947.

the behaviour of sterile and boiled milk towards rennet and acid, A., ii, 1114.

Kremann, Robert [Konrad], dynamics of the reaction between alcohol and sulphuric acid. A correction, A., ii,

Kremann, Robert, J. Daimer, and E. Bennesch, the system CrO₃—H₂O, A., ii, 898.

Kremann, Robert, Dischendorfer, Frankovic, Hauser, Hönel, Schoulz, and Valenta, influence of substitution in the components on the equilibrium of binary solutions. V. Fluorene and polynitrobenzenes, A., ii, 871.

Kremann, Robert, and F. Hofmeier, the

electromotive behaviour of ternary alloys. The ternary system zinc-

silver—lead, A., ii, 848.

the ternary system silver—zinc—lead. The theory of the Parkes process, A., ii, 884.

Kremann, Robert, and H. Neumann, kinetics of the formation of methyl hydrogen sulphate and of methyl ether, A., ii, 28.

Krestovnikoff, A. See Herbert Freund-

Kretschmer, A., composition of fahlerz, A., ii, 119.

Kretschmer, E. See Carl Neuberg.

Kreutz, Stefan, piezo-optical behaviour of ammonium chloride, A., ii, 352.

Kreybig, Ludwig von, pyknometer for density determinations, A., ii, 967.

Krieger, apparatus for the estimation of nitrogen by Kjeldahl's method, A., ii, 1027.

examination of ferric oxide in the presence of alumina, A., ii, 1034. Kristeller, L. See Florentin Medi-

greceanu.

Krog, Karl, and John Sebelien, estimation of nitrates in vegetable matter, A., ii, 227.

See Ludwik Bruner. Krolikowski, M. Kroll. See Erwin Rupp.

Kronik, M., o-tolylacetaldehyde and its derivatives, A., i, 210.

Kruber, O. See Julius von Braun.

Krüger, Friedrich, nature of electrolytic dissociation and solution pressure, A., ii, 789.

Krüse, Karl. See Max Bamberger.

Krulla, Rudolf, quantitative relations in the distribution of a substance between two phases: adsorption, A., ii, 476.

the direct measurement of alterations in vapour pressure, and the vapour pressure method for showing, as a lecture experiment, the existence of compounds, A., ii, 480.

Kruyt, Hugo Rudolph, transformations of cis-cinnamic acid, A., i, 975.

recognition of racemic compounds, A., ii, 477.

relation between the three triple points of sulphur, A., ii, 879.

Kruyt, Hugo Rudolph. See also P. J. H. van Ginneken.

Krym, R. S., chemistry of digestion and absorption in the animal body. The digestion of a mixed diet in dogs and men, A., ii, 999.

Krym, R. S. See also Efim Semen London.

Krzemecki, A. See Jósef Buraczewski. Kühling, Otto, action of phenylhydrazine ethyl benzoylacetate, 87.

Kühn, E., the extraction of silver from its ores by means of cyanides, A., ii,

Kümmell, Gottfried, active state of chlorine produced by light, A., ii, active state of 796.

Küstenmacher, M., the chemistry of honey formation, A., ii, 127.

üster, William, dianilino-p-b quinoneanil, A., i, 69. hæmin dimethyl ether, A., i, 95. dianilino-p-benzo-

the valency of iron in blood pigment, A., i, 409.

the occurrence of deoxycholic acid in gall stones, A., ii, 57.

Kugel, W. See Hugo Kauffmann. Kuhara, Mitsuru, and Shigeru Komatsu,

isomeric phenylphthalimides and some allied compounds. II., A., i,

Kuhara, Mitsuru, and Yoshinori Todo, the Beckmann rearrangement. A., i, 213.

Kulikoff, J. See Nicolai Zelinsky.

Kulka, Wilhelm. See Josef Habermann. Kullberg, Sixten. See Hans von Euler. Kummert, essential oil of wallflowers, A., i, 658.

Kunckell, Franz, aromatic amino-ketones, A., i, 990.

Kuntner, J. See Paul Pfeiffer.

Kuntze, Fritz. See Johannes Gadamer. Kuntzen, Harold. See Raphael Meldola.

Kunzè, Gerhard, methyl-, dimethyl-, and trimethyl-creatinines, A., i, 21.

Kunz-Krause, Hermann, and Paul Manicke, pyrogenetic decomposition of cyclogallipharic acid, A., i, 130.

Kupfer, Otto. See Martin Freund, and

 $ar{H}ermann$ Staudinger.

Kuriloff, Basil B., grading of the intensity in the properties of chemical compounds and additive products, A., ii, 873.

Kurnakoff, Nicolai S. See Nicolai N. Nagornoff, and Wladimir I. Smirnoff.

Kurowski, Eduard, and L. Nissenmann, salts of pertitanic acid with organic bases, A., i, 183.

propylamine peroxide, A., i, 608. Kurtenacker, Albin, elementary analysis,

A., ii, 823.

Kurtenacker, Albin, and H. Habermann, ethyl acetate, A., i, 600.

Kusnetzoff, S. D., Trans-Baikal minerals, A., ii, 1104.

Kusnezoff, K. A. See Wassili W. Scharwin.

Kutscher, Friedrich, the physiological action of an ergot base, and of 4-8aminoethylglyoxaline, A., ii, 59. basic substances in extract of mush-

room, A., ii, 528. Kutscher, Friedrich. See also Dankwart Ackermann, and R. Engeland.

Kuttner, L., and Georg Pulvermacher, the occurrence and diagnostic significance of a peptolytic enzyme in the stomach contents, A., ii, 513.

Kuzirian, Simon Boghos.

Austin Gooch. See Frank

Kylin, Harald, the green and the yellow colouring matters of the Floridex, A., ii, 1024.

Kym, Otto, and S. Kowarski, benziminazoles and benzoxazoles and azo-dyes derived therefrom, A., i, 1044.

L.

Laar, Johannes Jacobus van, "simple" and complex "systems" of thermodynamical chemistry, A., ii, 256. Labat, J. A., presence of bromine in

human organs, A., ii, 533.

extraction of bromine and iodine from aqueous solutions by means of chloroform or carbon disulphide, A., ii, 653.

Labaune, L. See Roure-Bertrand Fils. Labbé, *Henri*, and L. Violle, ingestion of mineral acids by the dog, A., ii, 220.

Lachs, Hilary, and Hans Friedenthal, the colorimetric estimation of iron, A., ii, 542.

Lachs, Hilary, and Leonor Michaelis, adsorption of neutral salts, A., ii, 190, 1069.

Lacroix, [Antoine François] Alfred, two uraniferous columbo-titanates from Madagascar, A., ii, 295.

radioactive minerals from Madagascar, A., ii, 296.

veined lodes of peridotites in New Caledonia, A., ii, 406.

Lacroix, Alfred, and Etienne Rengade, optical properties of rose beryl from Madagascar, A., ii, 736.

Ladenburg, Albert, application of the phase rule to stereoisomeric compounds and the recognition of racemic compounds, A., ii, 265.

application of the phase rule in stereochemistry and the recognition of racemic compounds, A., ii, 707.

Ladenburg, Rudolf, absorption luminous hydrogen, A., ii, 83.

Ladisch, Carl. See Alfred Einhorn. Laer, Henri van, velocity of saccharification of starch, A., ii, 28, 478.

La Forge, Frederick Burr. See Phæbus A. Levene.

La Franca, S., purine metabolism in diseases of the liver, A., ii, 1013.

Lahociński, Z. See Ludwik Bruner. Laidlaw, Patrick Playfair, [physiological] action of some isoquinoline derivatives, A., ii, 220.

physiological action of \(\beta\)-aminoethyl-

indole, A., ii, 1120.
Laidlaw, Patrick Playfair.
Henry Hallett Dale. See also

Lainé, \tilde{E} . See Achille Müntz.

Lakus, K., galvanic estimation of copper in preserves, A., ii, 771.

Laloue, G., essential oils. I. Orange flower oil. II. Schinus molle oil, A., i, 138.

Lamb, Francis William, the inhibition by cholesterol of the irritating action of oleic acid, A., ii, 52.

Lamm, G., the action of veratrine on striated muscle. I., A., ii, 813.

Lamplough, Francis Edward Everard, the depression of the freezing points of sodium and calcium chlorides, A., ii, 581.

Lamprecht, Hermann, the band spectrum of lead, A., ii, 831.

Landau, Bernhard, influence of the solvent on the rotatory power of opti-cally active substances, A., ii, 450.

Landau, Bernhard. See also Emil Aberhalden.

Landau, Marc, action of ultra-violet light on lactic acid, A., i., 515.

Landauer, Paul. See Hugo Weil. Lander, George Druce, and A A.Walden, detection of traces of hydrogen

cyanide, A., ii, 668. Landseiedl, A. See Max Bamberger.

Lane, Joseph Henry. See Arthur Robert Ling.

Lanfry, Maurice, a new thiophen compound, C₁₀H₆S₂, and some of its derivatives, A., i, 151. dinaphthathiophen, A., i, 555.

oxythiophens, A., i, 740.

oxy-2-methylthiophens, A., i, 1009.

Lang, Georg, the influence of manganese on the properties of mild steel, A., ii, 206.

Lang, R. See Zdenko Hanns Skraup.

Lang, William Robert, note on some metallic compounds of substituted

ammonias, P., 140.

Lang, William Robert, and Hoyes Lloyd, lecture experiment to illustrate dust explosions; the surface areas of certain finely-divided combustible solids, P., 161.

Lange, Hans, the composition of heliumcontaining minerals, A., ii, 499.

Lange, Martin, preparation of pyrazine derivatives, A., i. 505.

Langezaal, (Mlle.) J. See Jacob Böeseken.

Langheld, Kurt, esters and amides of the phosphoric acids. II. Attempts to prepare substances allied to the lecithins, A., i, 705.

Langley, John Newport, action of salts on the neural and non-neural regions

of muscles, A., ii, 628.

Langley, Ralph Walker.

Ward Foote. See Harry

Lanis, E. See Marussia Bakunin.

Lankshear, Frederick Russell, and Arthur Lapworth, the absorption spectra of the isomeric hydrazones and semicarbazones of camphorquinone, T., 1785; P., 224.

Lankshear, Frederick Russell, and William Henry Perkin, jun., epicamphor: a new isomeride of camphor, preliminary note, P., 166.

Lanzoni, F. See Giuseppe A. Barbieri. Lapidus, Herman, diastase and commercial lecithin preparations, A., i, 248.

Lapworth, Arthur, cholesterol in animal

tissues, A., ii, 305.

Lapworth, Arthur, and James Riddick Partington, electromotive forces in alcohol. Part I. Concentration cells with electrodes reversible to chlorine ions, T., 1417; P., 194.

Lapworth, Arthur, and Victor Steele, a new stereoisomeride of cyanodihydrocarvone, T., 1877; P., 240. some properties of phenyl isopropyl ketone, T., 1882; P., 239. Lapworth, Arthur. See also Robert

Taylor Hardman, William Jacob Jones, and Frederick Russell Lankshear.

See Henri Larguier des Bancels, J. Bierry.

Laria-Botte, A. See Guido Pellizzari. Larkin, Herbert K. See Martin A. Rosanoff.

La Roche & Co. See Hoffmann, La Roche & Co.

Larsen, Esper S., jun., and Waldemar Theodore Schaller, hinsdalite, a new mineral, A., ii, 1102.

Laschtschenko, P. N., specific heats of barytes, witherite, fused lime, quartz, and chalcedony at high temperatures, A., ii, 253.

transformation of aragonite into calcite, A., ii, 886.

Lasocki, Eduard. See Fritz Ephraim. László, Ernst, the hyperbolæ of furnace

gas constituents, A., ii, 929.

Lathrop, Elbert C. See Oswald Schreiner

and Edmund C. Shorey.

Lattes, Leone, the fat of dog's blood under normal and various experimental conditions (digestion, hunger, and phosphorus, phloridzin and chloroform poisoning, A., ii, 994.

Lauder, Alexander. See James Johnston Dobbie.

Launoy, L., toxicity of some inorganic and organic arsenic compounds and

tolerance to these poisons, A., ii, 60. Launoy, L., and G. Levaditi, mercurial therapeutics of experimental syphilis in the rabbit and of Brazilian spirollosis, A., ii, 912.

Laurie, Arthur Pillans, the temperaturecoefficient of concentration cells, in which the same salt is dissolved in two different solvents, A., ii, 576.

Laux, J. See Robert Stollé.

Lavaux, James, action of dichloromethane on di-p-tolylmethane, A., i,

Laveran, A., and Roudsky, action of an oxazine (3:5:9-triaminophenoxazonium chloride) on trypanosomes, A., ii, 911.

Lavilla Llorens, Felipe, reactions of cyclic amines, A., ii, 78.

Law, Douglas John. See Henry Julius Salomon Sand and Joseph Turney \mathbf{W} ood.

Law, Herbert Drake, electrolytic reduction. Part IV. Aromatic aldehydes, T., 1113; P., 138.

- Law, Herbert Drake, electrolytic reduction. Part V. Benzylidene bases, P., 310.
- Laws, Ernyst Graham, and Nevil Vincent Sidgwick, isomeric acetaldehydepheny hydrazones, T., 2085; P., 263.

Laxa, Otokar, estimation of catalase, A., ii, 675.

Lebas, C. See Henri Hérissey.

Le Bas, Gervaise, the influence of the alternating factor in certain series on the molecular volumes at the melting point, P., 196.

Lebeau, Paul [Marie Alfred], uranyl nitrate and the nature of its ethereal

solution, A., i, 257.

the formula of uranium carbide, A., ii,

the hydrates of uranyl nitrate, A., ii., 403.

definite bismuthides, A., ii, 405.

Lebedeff, Alexander von, extraction of zymase by simple maceration, A., i, 248.

extraction of zymase, A., i, 828; ii,

is zymase a diastase? A., i, 828.

hexosephosphoric acid ester, A., i,

the mechanism of alcoholic fermenta-

tion, A., ii, 816, 1122.

Lebedeff, A. J., the formation of nitric oxide by Bacillus Hartlebi during denitrification, A., ii, 917.

Lebedeff, Peter, fusion experiments with some metasilicates, A., ii, 604.

Lebedeff, Sergius V., polymerisation of diethylene hydrocarbons of the type C:C·C:C, A., i, 26.

polymerisation of diethylene hydro-carbons. II. Polymerisation and isomerisation of as-dimethylallene, A., i, 774.

Lebedeff, Sergius V., and (Mile.) N. A. Skavronskaja, polymerisation of di-ethylene hydrocarbons. III. Divinyl, A., i, 959.

Le Blanc, Max [Julius Louis], and M. Eschmann, formation and decomposition of calcium cyanamide, A., i,

Le Blanc, Max, and E. Plaschke, preparation of formaldehyde from methyl alcohol by the contact process, A., i,

Le Chatelier, Henri [Louis], alterability of aluminium, A., ii, 398. metallographic notes, A., ii, 894.

Lecher, Hans. See Heinrich Wieland. Lechner, Gedeon, effect of the frequency and form of the current on the formation of ozone, A., ii, 797.

Lechner, Gedeon, estimation of ozone by an alkaline solution of potassium iodide, A., ii, 822.

Lecocq, Emile, the carbonyl ferrocyanides. Their extraction, analysis, and applications, A., i, 269.

estimation of cyanogen compounds in coke oven gases, A., ii, 161.

Lecoq de Boisbaudran, Paul Émile [dit François], dehydration of salts, A., ii,

Lecoq de Boisbaudran, Paul Émile, and Antoine de Gramont, the spectrum of glucinum and its bands in different Iuminous sources, A., ii, 832.

Lederer, Charles, aromatic tellurinium compounds with the same hydrocarbon

residue, A., i, 857.

Lederer, Karl. See Martin Freund.

Lederer, Richard, and Karl Stolte, the composition of the heart of man and dog, A., ii, 906.

Leduc, Anatole, internal pressure in gases; equations of state and the law of molecular attraction, A., ii, 792.

Leeden, Rudolf van der, aluminium silicate minerals in soils, A., ii, 299.

relations of some aluminous silicate weathering products, A., ii, 299.

Leete, Harold, and Edward de Barry Barnett, note on the action of hydrogen dioxide on thiobenzanilide, P., 120.

Leeuw, H. L. de, the system acetaldehyde

—ethyl alcohol, A., ii, 870. Leeuw, H. L. de. See also Andreas Smits.

Léger, Eugène, action of nitric acid on aloins; production of tetranitroaloeemodin and of 2:4:6-trinitro-3-hydroxybenzoic acid, A., i, 140.

constitution of nitro-compounds obtained by the action of nitric acid on aloins, A., i, 734.

Le Goff, J., glycosuria and sucrosuria in a healthy man, following the ingestion of 100 grams of sucrose, A., ii,

Lehmann, Franz. See Erwin Rupp. Lehmann, Karl Bernhard, Val. Behr, Leonhard Quadflieg, Margarete Franz, Georg Herrmann, Adolph Heinrich Knoblauch, Karl Gundermann, and Würth, the influence of the chlorinated hydrocarbons of the fatty series on the organism, A., ii, 634.

Lehmann, Otto, molecular structure and optics of large liquid crystals, A., ii, 679.

Lehnardt, R. See Paul Pfeiffer.

Leidreiter, Paul, behaviour of manganese in the soil towards some agricultural plants, A., ii, 923.

Leimdörfer, J., technical soaps as colloidal solutions, A., ii, 794.

Leiningen, W. [Graf] zu. See Rudolf Emmerich.

Leiser, Richard, electrical double refraction of carbon compounds, A., ii, 563.

Leister, J., estimation of nicotine in tobacco extracts, A., ii, 345.

Leman, E. D. See Warren R. Smith. Lematte, L., physical analysis of peptones: new form of apparatus for cryoscopic determinations, A., ii, 447.

Lemberger, Frieda. See Carl Schwarz. Lemoult, Paul, the new series of leucobases and colouring matters from diphenylethylene, A., i, 399.

derivatives of styrene; rectification of some experimental errors, A., ii, 583.

Lendrich, K., E. Koch, and L. Schwarz, Hydnocarpus fats, A., ii, 1125.

Lenert, August, the dielectric constants of the halogen compounds of lead, A., ii, 178.

Lenk, E., and H. Brach, concentric stratification in filter paper, A., ii, 702.
 Lenk, Emil. See Otto von Fürth and Alois Kreidl.

Lenko, Josef. See Roland Scholl.

Lentz, G. See Oscar Bally.

Lenz, Wilhelm, constituents of Derris species, A., ii, 645. analysis of camphor, A., ii, 665.

Lenz, Wilhelm, and E. Richter, detection of perboric acid and some similar compounds, A., ii, 823.

Lenz, Wilhelm, and Nikolaus Schoorl, microchemical test for sodium, A., ii, 439.

Lenzner, Alfred. See Hans Stobbe. Leonardi, G. See Guido Bargellini. Leoneini, Giovanni, soluble carbohydrate

of chestnut flour, A., ii, 1023.

Lepape, Adolphe. See Charles Moureu.

Lepeschkin, W. W., composition of the plasma membrane, A., ii, 817.

the action of anæsthetics on the osmotic properties of the plasma membrane, A., ii, 919.

Lepetit, Roberto, and E. Levi, action of sodium sulphite and of sodium hydrogen sulphite on some azo-dyes, A., i, 930.

Lépine, Raphael, and Raymond Boulud, the sugar of plasma and blood-corpuscles, A., ii, 619.

Lepkowski, W. G. von, critical phenomena in solutions under the kardioid ultramicroscope, A., ii, 95.

Lepsius, R. See Emil Fischer. Leroide, J. See Eugène Tassilly. Les Etablissements Poulenc Frères and Ernest Fourneau, preparation of secondary amino-alcohols, A., i, 291.

preparation of mercury derivatives of alkali alkyldithiocarbamic acetates, A., i, 841.

Leslie, (Miss) May Sybil, molecular weight of the thorium emanation, A., ii, 843.

thorium and its products of disintegration, A., ii, 1048.

Leslie, (Miss) May Sybil. See also Harry Medforth Dawson.

Lespieau, Robert, condensation of αβdibromopropaldehyde with malonic acid, A., i, 106.

ethyl- γ -chloroacetoacetate, A., i, 108. method for preparing certain true acetylenic alcohols, A., i, 347.

Lesser, E. J. See Heinrich von Hoesslin.

Lesser, Rudolf, preparation of o-carboxylic derivatives of arylthiolacetic acids, A., i, 456.

[preparation of condensation products from p-benzoquinone or α-naphthaquinone], A., i, 994.

Le Sueur, Henry Rondel, preparation of secondary amines from carboxylic acids. Part II. Preparation of the heptadecyl and pentadecyl derivatives of α - and β -naphthylamine, T., 827; P., 104.

Lesueur, M., occurrence of sucrose in the dry roots of certain plants of the Aristolochiacex, and of a glucoside decomposed by emulsin in those of Asarum europæum, A., ii, 525.

Letsche, Eugen, glycocholic acid and para-glycocholic acid, A., i, 784.

Leuchs, G. A. See Alexander Gutbier. Leuchs, Hermann, improved method of preparation of mono-substituted malonic and acetoacetic esters, A., î, 602

Leuchs, Hermann, and Rudolph Anderson, strychnine alkaloids. XI. The brucine-nitric acid reaction; preparation of a new alkaloid, bisapomethylbrucine, A., i, 746.

methylbrucine, A., i, 746. strychnine alkaloids. XII. Derivatives of bisapomethylbrucine, A., i,

1018

Leuchs, Hermann, and Walter Geiger, strychnine alkaloids. XIII. Isolation of a fourth brucinesulphonic acid, A., i, 1018.

Leuchs, Hermann, and Fritz Simion, byproducts of the preparation of ethyl phloroglucinoldicarboxylate, A., i, 646. Leuchter, M., modified cobalt reaction for the detection of small quantities of hydrogen peroxide, A., ii, 1026.

Leulier, Albert, desiccation of cis-terpin hydrate, A., i, 548.

Algerian oleander bark, A., ii, 922. Leuner, Karl. See Hans Stobbe.

Leupold, Hans. See Arthur Michael.

Levaditi, G. See L. Launoy. Levallois, Ferdinand. See Louis Bou-

Levene, Phæbus A., prolylglycineanhydride formed by the tryptic digestion of gelatin, A., i, 97.

Levene, Phæbus A., and Walter Abraham Jacobs, hexoses from d-ribose, A., i, 14.

yeast-nucleic acid, A., i, 96, 510.

the pentose from the pancreas, A., i, 97.

inosic acid. IV., A., i, 408.

Levene, Phæbus A., and Frederick Burr La Forge, triticonucleic acid, A., i, 96. Levene, Phæbus A., and Florentin Medigreceanu, nucleases, A., i, 410, 698. nuclein metabolism in the dog, A., ii,

action of gastro-intestinal juices on

nucleic acids, A., ii, 744.

Levene, Phæbus A., and Gustave M.

Meyer, the combined action of muscle plasma and pancreas extract on glucose and maltose, A., ii, 414.

Levene, Phæbus A., Donald D. van Slyke, and F. J. Birchard, the partial hydrolysis of proteins. III. Fibrin

protoalbumose, A., i, 822.

Levene, Phæbus A. See also George William Heimrod and Walter Abraham Jacobs.

Levi, E. See Roberto Lepetit.

Lévi, Lucien. See Emile Fleurent.

Levi, Mario Giacomo, and O. Garavini, preparation of borax. II., A., ii,

Levi-Malvano, Mario, and O. Ceccarelli, the ternary system zinc-lead-tin, A., ii, 1088.

alloys of zinc, lead, and tin, A., ii, 1089.

Levites, S., organic colloids, A., i, 247. adsorption experiments, A., ii, 858.

Lévy-W., Nathan, use of carbon disulphide for the direct estimation of [free] sulphur in minerals, A., ii, 1130.

Lewin, Louis, the toxic action of methyl

alcohol, A., ii, 753.

Lewis, Dean D. See Joseph L. Miller.

Lewis, Gilbert Newton, and Arthur Edgar, the equilibrium between nitric acid, nitrous acid, and nitric oxide, A., ii, 264.

Lewis, Gilbert Newton, and Merle Randall, heat content of the various forms of sulphur, A., ii, 371.

Lewis, Gilbert Newton, and Frank F. Rupert, the potential of the chlorine electrode, A., ii, 364.

Lewis, R. H. See Richard Sidney Cur-

Lewis, William Cudmore McCullagh, latent heat of vaporisation of liquids, 🛦 , ii, 855.

Lewis, William Cudmore McCullagh. See also Alexander Roshdestwensky.

Lewoniewski, (Mlle.) S., variations in the amounts of single phosphoric acid compounds in seeds depending on conditions of vegetation, 641.

Ley, Heinrich, and K. von Engelhardt, the colour of iodine solutions, A., ii,

Leyko, Z. See Leon Marchlewski. Leysaht, Hans. See Eugen Deiss. Lichtenbelt, Mlle. See Jacob Böeseken.

Lichtenstadt, Leo. See Jakob Meisenheimer.

Lichtwitz, Leopold, the work of concentration of the kidneys, A., ii,

colloids in the urine. II. Quantity and conditions of solubility of the urinary colloids in healthy and pathological kidneys, A., ii, 632.

the mechanism of the action of adrenaline, A., ii, 754. Lickfett, Herbert. See Otto Ruff.

Lidoff, Alexander P., the existence of other gaseous compounds of carbon and nitrogen besides cyanogen, A., i, 429.

reduction of potassium cyanate with hydrogen, A., i, 617.

formation of cyanates from nitrates, A., i, 618.

oxidation of sodium cyanamide and cyanates with hydrogen peroxide and alkaline bromine solution, A., i, 618.

Lieber, G. Diethelm, the sugar in the nodules of Nephrolepis hirsutula, A., ii, 921.

Liebermann, Carl [Theodor], dye in the root of azafran, A., i, 391.

synthesis of orthoquinones, A., i,

Liebermann, Carl, and Milan Zsuffa, introduction of the carboxylic group into polynuclear aromatic hydrocarbons, A., i, 202.

ethyl polycinnamate, A., i, 370. derivatives of aceanthrenequinone, A.,

i, 387.

Liebermann, Leo von, apparatus for determination of viscosities, especially of serum and other animal fluids, A., ii, 585.

improvements in Kjeldahl's nitrogen apparatus, A., ii, 655.

apparatus for the estimation of the

melting points of fats, A., ii, 1039. Liebermann, Leo von, and Franz Wiesner, the oxygen-transport capacity of blood warmed to different temperatures, A., ii, 993.

Liebert, F., a simple laboratory suctionpressure pump, A., ii, 480.

Liebig, H. J. von. See Carl J. Lintner. Liebisch, Theodor, zonal structure and electrical properties of cassiterite, A., ii, 498.

Liebrecht, Arthur, the separation of 6chloro-m-cresol in the chlorination of pure m-cresol, or of the technical mixture of m- and p-cresols, A., i, 629.

Liebreich, Erik, the variation of the refractive index with the temperature in the ultra-red region for rock-salt, sylv-

ine, and fluorite, A., ii, 165. Liechti, Paul, and W. Mooser, estimation of phenols in the urine of oxen,

A., ii, 942.

Liesegang, Raphael Ed., supersaturation theory of certain apparently rhythmical reactions, A., ii, 27.

the colours of colloidal sulphur, A., ii,

"ripening" of silver halide emulsions, A., ii, 39. reactions in gelatinous media, A., ii,

colloidal chemistry of histological silver staining, A., ii, 971.

Liesse, Ch., estimation of minimum quantities of calcium in presence of a large excess of magnesium, A., ii, 154.

Liffa, Aurél, iron-pyrites from Hungary, A., ii, 46.

Lifschitz, Israel, old and new benzene formulæ, A., i, 622, 774.

Lillie, Ralph Stayner, physiology of cell-division. III. Action of calcium salts in preventing the initiation of cell-division in unfertilised eggs through isotonic solutions of sodium salts, A., ii, 128.

the relation of stimulation and conduction in irritable tissues to changes in the permeability of the limiting membranes, A., ii, 750.

Limpach, Otto. See Max Busch.

Lincio, Gabrielle, a ferriferous dolomite from the Simplon tunnel, A., ii, 1101. Linck, Gottlob Eduard, origin of dolomite, A., ii, 294.

Lind, S. C., some chemical effects of the rays of radium, A., ii, 841.

Lindemann, F. A., specific heats at low temperatures. IV., A., ii, 369.

calculations of the frequencies of the electrons giving rise to the selective photo-electric effect, A., ii, 788.

Lindemann, F. A. See also Walther Nernst.

Linden, T. van der, application of the phase rule to stereoisomeric compounds and the recognition of racemic compounds, A., ii, 477.

Linden, T. van der. See also Arnold Frederik Holleman.

See Wladimir J. Lindener, B. A. Vernadsky.

Lindeck, Stephan, a relationship between the temperature-coefficient and the specific resistance of certain metals, with special reference to copper, A., ii, 176.

Lindet, Léon, elective power of vegetable cells for dextrose and lævulose, A., ii, 422.

estimation of sugar and of calcium in the residues from sugar purification, A., ii, 664.

Lindhard, J., excitability of the respiratory centre, A., ii, 617.

Lindhard, J. See also K. A. Hasselbalch.

Lindner, J., the pinacolin transformation. I., A., i, 522.

Lindner, Paul, and K. Saito, assimilability of different carbohydrates by different yeasts, A., ii, 758. Lindsay, Dorothy E., the effect of chloro-

form on the intermediate protein metabolism of the dog, A., ii, 303.

protein metabolism of the fœtus: the distribution of nitrogen in the maternal urine and in the feetal fluids throughout pregnancy, A., ii, 1115.

Ling, Arthur Robert, Lewis Eynon, and Joseph Henry Lane, the solution densities of dextrose, levulose, and maltose, A., i, 354.

Linhart, George Augustus. See William $A\,llcn$ ${f Drushel}.$

Lintner, Carl J., and H. J. von Liebig, the reduction of furfuraldehyde by yeasts during alcoholic fermentation, A., ii, 816.

Lipinski, A. V., formation of hydrogen cyanide in the electric high tension arc, A., ii, 849.

Lipman, Charles B., fixation of nitrogen by yeasts and other fungi, A., ii, 1019.

Lipman, Jacob Goodale, Percy E. Brown, and Irving L. Owen, ammonia and nitrate formation in soils, A., ii, 649.

Lipman, Jacob Goodale, Percy E. Brown, and Irving L. Owen, the availability of nitrogenous materials as measured by ammonification, A., ii, 924.

Lipp, Peter, isocamphane, A., i, 731.

Lippich, Fritz, precipitation of protein by zinc sulphate, A., i, 934.

Lippmann, Alexander, electrical double refraction (Kerr effect) in liquids and its relation to chemical composition and constitution, A., ii, 184.

Lippmann, Edmund Oskar von, the history of "potash" and of its name,

A., ii, 38.

occurrence of d-galactose, A., ii, 142. the history of the name "gas," A., ii, 199.

Lippmann, Edmund Oskar von, and Ernst Erdmann, the "de-salting of sea-water" according to Aristotle, A., ii, 723.

Litter, H. See Reinhold von Walther. Little, Harry Frank Victor. Se Edward Cahen.

Little, Otway Henry. See Walter Noel Hartley.

Littlebury, William Oswald. See Robert Howson Pickard.

Litvin, I. See Leo Pissarjewsky.

Liverani, Raffaele. See Francesco Carlo Palazzo.

Llord y Gamboa, Ramón, composition of blende from Picos de Europa, A., ii, 733.

Lloyd, Francis E., the relationship between tanning substance and another colloid in ripening fruits, especially Phanix, Achras, Diospyros, A., ii, 918.

Lloyd, Hoyes, the adsorption of some substances by starches, A., ii, 700.

Lloyd, Hoyes. See also William Robert Lang.

Lockemann, Georg, the adsorption of arsenic by ferric hydroxide, A., ii, 485. chemistry of tuberculin, A., ii, 916. detection of small quantities of arsenic

in urine, blood, and other organic substances, A., ii, 1028.

Lockemann, Georg, and Martin Paucke, the adsorption of arsenic by aluminium and ferric hydroxides, A., ii, 720.

Lockemann, Karl. See Hermann Pauly. Lockett, William T. See Gilbert John Fowler.

Lockyer, (Sir) Norman, the sequence of chemical forms in stellar spectra, A., ii, 81.

Locquin, René, 2-methyl·laurenone: a new ketone derived from camphor, A., i, 792.

Locquin, René. See also Philippe Barbier and Louis Bouveault. Loeb, Adam, protein metabolism of the dog, and the effect of feeding with protein and protein cleavage products on the secretion of bile, with special reference to time relationships, A., ii, 51.

Loeb, Jacques, antagonistic action of salts, A., ii, 221.

the mechanism of antagonistic salt action, A., ii, 1018.

Loeb, Jacques, and Hardolph Wasteneys, further remarks on the relationship between the magnitude of oxidation and cytolysis of sea-urchin's eggs, A., ii, 304.

the antagonism in the toxic action of potassium and sodium salts, A., ii,

420.

the increase of the toxic action of potassium chloride by low concentrations of sodium chloride, A., ii, 517.

the antagonistic action of the salts of calcium and other alkaline earths to potassium poisoning, A., ii, 637.

the antagonism of acids by salts, A., ii, 755.

the antagonistic action of sodium to potassium chloride, A., ii, 756.

are the oxidative processes independent variables in vital processes? A.. ii, 1110.

Loeb, Leo, and Moyer S. Fleisher, the significance of oxygen for the growth of mammalian tissue, A., ii, 1007.
 Löb, Walther, the history of chemical

fermentation hypotheses, A., i, 14. photochemical synthesis of carbohydrates from carbon dioxide and hydrogen in absence of chlorophyll, A., i, 263.

glycolysis. II. The influence of phosphates on oxidative glycolysis, A., ii, 504.

Löb, Walther, and Georg Pulvermacher, glycolysis: the oxidative destruction of sugar by the action of organic preparations, A., ii, 54.

Loebe, Richard, the ternary alloys of lead, tin, and antimony, A., ii, 204.

Loebell, Heinrich, estimation of the acidity of fats and oils, especially lubricating oils, A., ii, 342.

Loele, W., colorimetric detection of some oxidising substances of the body, A., ii, 675.

Loening, Fritz, gaseous metabolism in anaphylactic shock, A., ii, 993.

Loening, Hermann, and Hans Thierfelder, cerebrosides of the brain, A., i, 898. Loevy, Julius, estimation of gold and

silver in rich copper ores, A., ii, 338.

Loew, Oscar [Carl Benedict], the theory of enzyme action, A., i, 409.

catalase, A., i, 828.

the action of strontium salts on algæ, A., ii, 322. the physiological rôle of calcium salts,

A., ii, 323.

Loew, Oscar, and Thomas Bokorny, active albumin and tannin in plant cells, A., ii, 324.

See also Rudolf Emme-Loew, Oscar. rich.

Loewe, Siegfried, the combination of tetanus toxin with other substances, A., ii, 638, 912.

Loewen, Heinrich, repeating figures in the atomic weight values, A., ii,

Löwenstein, Ernst, and Ernst Peter Pick, antigen formation in protein-free culture media, A., ii, 317.

Loewinson-Lessing, Franz, a hitherto unrecognised crystallo-chemical relation, A., ii, 807.

Loewit, Moriz, formation of sugar in the liver, A., ii, 130.

Löwy, L. See Friedrich Kehrmann. Logie, W. J., the action of nitrates and nitrites of dysentery organisms, A., ii, 1121.

Lohmann, Alfred, some constituents of suprarenal, thyroid, and testis, A.,

simple apparatus for filtering under increased pressure, A., ii, 1081.

Lombard, Robert H. See Arthur Amos

London, Efim Semen, a reversible phenomenon in the action of intestinal juice on the products of casein digestion, A., ii, 1000.

London, Efim Semen, and W. F. Dageeff, the laws of digestion and absorption. X. The disappearance of a solution of dextrose from the stomach, A., ii, 1000.

London, Efim Semen, W. F. Dagéeff, B. D. Stassoff, and O. J. Holmberg, digestive and absorptive defects, A., ii, 998.

London, Efim Semen, and Gabrilowitsch, the laws of digestion and absorption. XI. Absorption of protein and carbohydrates, A., ii, 1001.

London, Efim Semen, and R. S. Krym, the specific adaptation of the digestive juices. IV. The relative amount of enzymes in the intestinal chyme on different diets, A., ii, 1000.

London, Efim Semen, and A. G.Rabinowitsch, chemistry of digestion and absorption in the animal body. XI. The degree of cleavage of different proteins in the alimentary canal, A., ii, 999.

London, Efim Semen, and Alfred Schittenhelm, digestion and absorption of nucleic acid in the alimentary canal,

A., ii, 52.

London, Efim Semen, Alfred Schittenhelm, and Karl Wiener, digestion and absorption of nucleic acid in the gastro-intestinal canal. II., A., ii, 745.

London, Efim Semen, and S. Solowéeff, the action of intestinal juice on the digestive products of various proteins, A., ii, 1000.

London, Efim Semen. See also Emil Fischer.

Long, Frank Stevenson, the velocity of addition of alkyl bromides to cyclic tertiary bases, T., 2164; P., 283.

Longmuir, Percy, the corrosion of metals, A., iı, 1089.

Loram, Herbert Yabsley, simple method of decomposing refractory tin ores, P., 60.

Lorenz, Norbert von, estimation of phosphoric acid by direct weighing of ammonium phosphomolybdate, A., ii,

Lorenz, Richard, "pyrosols": colloidal phenomena in molten solids, A., ii, 379.

orenz, Richard, Georg von Hevesy, and E. Wolff, nature of the metallic "fog" in fused salts, A., ii, Lorenz,

Loring, Frederick Henry, atomic weight

relations, A., ii, 197.

Losanitsch, Sima M., electrosyntheses. VI., A., i, 177.

constitution of divalolactone, A., i,

Loseff, K., regularity of composition of

eutectic alloys, A., ii, 496.

Lottermoser, [C. A.] Alfred, solid colloidal solutions, A., ii, 194.

anomalous adsorption, A., ii, 969. Lottermoser, Alfred, and P. Maffia, a new proof of the existence of an adsorption equilibrium in hydrosols, A., ii, 99.

Louise, Émile, analysis by means of miscibility curves; application to the examination of cod liver oils, A., ii,

Low, Wilson H., precipitation of nickel compounds and preparation of spongy nickel, A., ii, 1139.

Lowry, Thomas Martin. See William Robert Bousfield.

Loy, Sylvester Kline, and Solomon Farley Acree, reaction of iodoacetonitrile with silver nitrate, A., i, 360.

Lubimenko, V. N. See N. A. Monteverde.

Luc, Armand de. See Frédéric Reverdin.

Lucas, (Mlle.) Pauline, dehydration of alkyl- and benzylphenyl-tert-butylcarbinols, A., i, 636.

Luckhardt, Arno B., and Frank C. Becht, source of immune substances in lymph. The part played by the spleen in the formation of immune substances, A., ii, 217.

the relation of the spleen to the fixation of autigens and the production of immune substances, A., ii, 812.

Lucking, Hubert L. See Hartwig Franzen.

Wilhelm. See Robert Ludewig, Behrend.

Luppo-Cramer, the differently-coloured forms of silver, A., ii, 394.

Lüttgen, Gustav, preparation of nitrobenzoic acids from the corresponding

nitrotoluenes, A., i, 128.

Luff, Bernard Dunstan Wilkinson, and William Henry Perkin, jun., experiments on the synthesis of the terpenes. Part XVI. Resolution of dl-1-methyl- Δ^3 -cyclohexene-3-carboxylic acid and synthesis of the d- and l-modifications of Δ^3 -m-menthenol(8) and $\Delta^{3:8(9)}$ -m-menthadiene, T., 518; P., 57.

Luftensteiner, H. See Paul Pfeiffer.

Luginin, Wladimir F., and Georges Dupont, heats of fusion of substances melting near the atmospheric temperature, A., ii, 369.

Lumière, Auguste, Louis Lumière, and Alphonse Seyewetz, differentiation by chemical development of latent images obtained by means of silver chloride and bromide emulsions, A., ii, 353.

Lumière, Louis. See Auguste Lumière. Lundeqvist, Gunnar. See Hans Euler. Lunelund, Harald, the structure of

certain spectral lines and the Zeeman effect in weak magnetic fields, A., ii,

Lungwitz, P. See J. Scheiber.

Lunkenheimer, Fritz, the ratio of the intensities of the series lines of hydrogen in the canal ray spectrum, A., ii, 950.

Lusby, S. G., the mobility of the positive flame ion, A., ii, 245.

Lusk, Graham, a method of removing glycogen from the human subject, A., ii, 215.

does dextrose arise from the digestion of cellulose? A., ii, 311.

Lussana, Silvio, influence of pressure and temperature on the electrolytic conductivity of solutions, A., ii, 462.

Luther, Robert, thermodynamics of the cell: Hg, HgCl, PbCl2, Pb., A., ii,

Luzzato, Riccardo, and G. Satta, the behaviour of o-iodoanisole in the organism, A., ii, 1015.

Lwoff, S. D., influence of enzymes on the respiration of plants, A., ii, 641.

Lynch, Jordan Roche. See Nathaniel Henry Alcock.

Lyon, T. Lyttelton, and James A. Bizzell, the relation of certain non-leguminous plants to the nitrate content of soils, A., ii, 1025.

Lyttkens, H., and J. Sandgren, the distribution of reducing substances in human blood, A., ii, 301.

the distribution of reducing substances in the blood of mammals, A., ii, 994.

M.

Maag, Rudolf. See Alfred Wohl. Maarse, J. See Andreas Smits.

Maass, O., and Douglas McIntosh, basic properties of oxygen: compounds of the halogen acids with benzene derivatives

containing oxygen, A., i, 289.

Maass, W. See Edgar Wedekind.

McAdam, D. J., jun., atomic weight of vanadium, A., ii, 117.

McAfee, A. McD. See John Livingston

Rutgers Morgan.

Macallum, E. N. See John C. McLennan.

McBain, James William, and (Miss) Millicent Taylor, constitution of soap solutions: solutions of "sodium palmitates," A., i, 349.

McCaughey, Robert S., estimation of volatile fatty acids in fæces, A., ii,

McCaughey, William J. See Frank Kenneth Cameron.

McCleland, Nial Patrick, bimolecular glycollaldehyde, T., 1827; P., 224.

McCombie, Hamilton. See Arthur Ernest Everest.

McCoy, Herbert Newby, and William C. Moore, organic amalgams; substances with metallic properties composed in part of non-metallic elements, A., i, 270.

McCoy, Herbert Newby, and Herbert J. Smith, equilibrium between alkaliearth carbonates, carbon dioxide, and water, A., ii, 380.

McCoy, Herbert Newby, and Charles D. Test, equilibrium between sodium carbonate, sodium hydrogen carbonate, and water. II., A., ii, 379.

McCrae, John, Kobert's reagent as a test for salicylic acid, A., ii, 1142.

McCrudden, Francis H., a glucose-protein compound in Ascaris lumbricoides, A., ii, 415.

albumin and globulin in the ovaries of Barbus fluviatus and the pike, A., ii,

the toxic action of certain fish ovaries, A., ii, 421.

estimation of calcium in the presence of magnesium and phosphates; estimation of calcium in urine, A., ii, 1136.

McDaniel, Alonzo Simpson, absorption of hydrocarbon gases by non-aqueous liquids, A., i, 829.

McDermott, F. Alex., luciferesceine, the fluorescent material present in certain luminous insects, A., i, 396.

some experiments on the formation of ammonia from its elements, A., ii,

hippuric acid as the cause of the failure of the spectroscopic test for hæmoglobin in urine, A., ii, 674.

stability of the photogenic material of the Lampyrida and its probable chemical nature, A., ii, 1113.

McDermott, F. Alex. See also Norman Roberts.

Macdonald, W. Kelman, fat removal in peripheral nerve-degeneration, A., ii, 1006.

Machiedo, L. See Ludwig Moser. McGowan, J. P., origin of immune substance, A., ii, 309.

MacInnes, Duncan A. See Edward W. $\mathbf{Washburn}$

McIntire, W. H., a modified drying tube, A., ii, 329.

Douglas, two - component McIntosh, Douglas, two-component systems. I. Ether—hydrobromic acid, ether-chlorine, and ether-bromine, A., i, 256.

McIntosh, Douglas. See also O. Maass and Arthur Stewart Eve.

Mackay, George Moir Johnstone, transference experiments with mixtures of potassium chloride and sulphate in aqueous solution, A., ii, 366.

McKendrick, Anderson Gray, chemical dynamics of serum reactions, A., ii, 618.

McKenzie, Alexander, configuration of the stereoisomeric dibromosuccinic acids, P., 150.

McKenzie, Alexander, and Fred Barrow, experiments on the Walden inversion. Part VII. Action of phosphorus pentachloride and of thionyl chloride on optically active hydroxy-acids and esters, T., 1910; P., 232.

McKenzie, Ivy. See Carl Hamilton Browning.

McKie, J. F. See Anton Julius Carl-

Maclaurin, James Scott, occurrence of pentathionic acid in natural waters, P., 10.

Maclean, Hugh. See Arthur Harden. McLennan, John C., and E. N. Macallum, the intensity of the earth's penetrating radiation at different altitudes and a secondary radiation excited by it, A., ii, 960.

Macleod, A. L. See Elmer Peter Kohler. Macleod, John James Rickard, and R. G. Pearce, experimental glycosuria. VI. The distribution of glycogen over the liver under various conditions. Post-mortem glycogenolysis, A., ii, 219.

experimental glycosuria. VII. The amount of glycogenase in the liver and in the hepatic blood as affected by stimulation of the splanchnic nerve, A., ii, 1009.

McMaster, Leroy. See Edward Harrison Keiser.

McMillan, Andrew. See Thomas Stewart Patterson and Paul Rabe.

McNicoll, David. See James Colquhoun Irvine.

McPherson, William, and Cecil Boord, action of substituted hydrazines on B-

o-toluquinone, A., i, 818.

MacRae, Duncan. See James E. Mills. Macrae, J. A. See W. O. Walker.

McWilliam, Andrew, and Ernest J. Barnes, influence of 0 2% vanadium on steels of varying carbon content, A., ii, 1092.

heat-treated 3% nickel steels, A., ii, 1092.

Madelung, Walter, strongly coloured holo- and meri-quinonoid imonium salts of benzidine and their use for determining the active value of oxidising agents, A., i, 323.

relation of hæmoglobin derivatives and peroxydases to inorganic catalysts, A., i, 411.

holo- and meri-quinonoid salts of benzidine, A., i, 678.

Maffia, P. See Alfred Lottermoser.

Magini, R., measurements of surfacetension, A., ii, 258.

Magnanini, Gactano, observations not in good agreement with the existence of atoms and molecules, A., ii, 710.

Magnin, Georges, new method for the destruction of organic matter by bromine, specially applicable in toxicology, A., ii, 1035.

Magnus-Levy, Adolf. See H. A. Klein. Mahler, P., and E. Goutal, employment of combustion under pressure in the estimation of carbon in steels, A., ii, 937.

Mai, Julius, compounds of phosphorus and sulphur, A., ii, 484.

compounds of sulphur and phosphorus. II. Syntheses with yellow phosphorus, A., ii, 719.

Mailhe, Alphonse, and Marcel Murat, synthesis of alcohols in the cyclohexane series, A., i, 126.

catalytic hydrogenation of cyclic oximes; synthesis of arylamines, A., i, 535.

Mailhe, Alphonse. See also Paul Sabatier. Maillard, Louis C., constitution of indirubin, A., i, 326.

action of colloidal sulphur on sulphur metabolism sulphoconjugation, A., ii, 622.

Main, Hugh, estimation of the ash and sugar in syrups by the determination of the electrical conductivity, A., ii,

Mair, Leopold. See Wilhelm Schlenk. Mair, William. See James Lorrain Smith.

Maisch, Karl. See Alexander Gutbier. Majewski, I., estimation of copper in pyrites, A., ii, 335.
 Majima, Rikō, oxidation of aniline. II.,

Ă., i, 216.

Majima, Rikō, and Yoshihiko Aoki, oxidation of aniline. III., A., i,

Makower, Walter, and Sydney Russ, scattering during radioactive recoil, A., ii, 172.

Makower, Walter. See also Kasimir Fajans.

Makowetzky, Alex., formation of hydrogen peroxide, nitric acid, and ammonia in the arc discharge, using water as one electrode, A., ii, 463.

Maksimoff, N. See O. Walter.

Malaquin, Paul, new method of prepar-

ing ozone by chemical means, A., ii, 387.

Malengreau, Fernand, and Georges Prigent, velocity of hydrolysis of glycerolphosphoric acid, A., ii, 795.

Malfatti, Hans, preparation of colourless alcoholic potassium hydroxide, A., ii,

Malfitano, Giovanni, the micellary or "colloidal" state, A., ii, 102.

certain arbitrary distinctions which are made in theoretical chemistry, A., ii, 377.

Malinowski, Wiatscheslaw. See Wilhelm Steinkopf.

Maljaroff, K. L. See Alexander M. Nastukoff.

Mallory, William J., uric acid excretion in gout and rheumatoid arthritis, A., ii, 219.

Malosse, H., specific rotatory power of camphor in acetone solution A., i, 730.

Malschewsky, W. See O. Walter. Malvezin, Philippe, rapid estimation of the volatile acidity of wines and fermented beverages, A., ii, 342.

a new treatment of wine, A., ii, 648. estimation of tannin in wines, A., ii,

779.action of nitrogen on wines, A., ii, 916.

Mameli, Efisio, diazoamino- and aminoazo-derivatives obtained from amino-

methylenedioxybenzene, A., i, 510. electrical conductivity of the chloroacetic acids in aqueous solution, A., ii, 459.

substances which mask the colour reactions of strychnine, A., ii, 552.

Mameli, Efisio, and Aldo Patta, p-iodophenylarsinic acid and some of its derivatives. II. Pharmacological action, A., ii, 911.

p-iodophenylarsinic acid and some of derivatives. III. Action on metabolism, on the circulation, and on trypanosomes, A., ii, 912.

See also Giuseppe Mameli, Efisio. Oddo.

Mameli, Eva, and Gino Pollacci, assimilation of atmospheric nitrogen by higher plants, A., ii, 759.

Manasse, Ernesto, melanterite and fibroferrite from the Cetine mine, Siena, A., ii, 499.

Manchot, Wilhelm, isomerism of anils (Schiff's bases). III., A., i, 36.

valency of the metal in blood-pigments, and the estimation of their gas-combining power; a critical study, A., i, 96.

Raschig's nitrosulphonic acid, "blue acid," A., ii, 107.

Mancini, J. See M. Raffo.

Mancini, Stefano, the residual carbon in human blood under normal and pathological conditions, A., ii, 504.

Mandowsky, K. See Arthur Binz. Manicke, Paul. See Hermann Kunz-

Krause.

Mann, Frank C. See Dennis Emerson Jackson.

Mannessier, Anna. See Giuseppe Oddo. Mannich, Carl, and Friedrich L. Hahn, synthesis of a-amino-ketones by means of hexamethylenetetramine, A., i, 648.

Mannich, Carl, and O. Hübner, pyridylacetylcatechol and related bases, A.,

i, 565.

Manning, M. F. See Oskar Klotz.

Mantovani, Eugenia. See Giuseppe Oddo.

Manz, Hermann. See Wilhelm Prandtl. Manzetti, Riccardo. See Italo Bellucci. Maquenne, Léon [assimilation of carbon by plants], A., ii, 760.

Marc, Robert, crystallisation from aqueous solutions. V. Adsorption by

crystals, A., ii, 193.

adsorption from solution, A., ii, 258. velocity of crystallisation and dissolution, A., ii, 265.

Marcellin, René, mechanism of irreversible phenomena, A., ii, 27.

Marchlewski, [Paul] Léon [Theodor], the existence of two chlorophyllins, A., i, 553.

green and yellow dyes of Floridea, A., ii, 1125.

Marchlewski, Léon, and J. Marszatek, chemical nature of allochlorophyll, A., i, 735.

Marchlewski, Léon, J. Marszałek, and Z. Leyko, the chlorophyll group, the duality of the chlorophyllans and allo-

chlorophyllan, A., i, 898.

Marchlewski, Léon, and J. Robel, the chlorophyll group. IV. Phyllopor-

phyrin, A., i, 552. the chlorophyll group. X. Phyllo-Îİ. Ä., i, 735. hæmin.

Marcille, *Réne*, mode of action of sulphur in combating Oidium, A., ii, 429.

Marck, A. See Georg Bredig.

Marckwald, Willy, mesothorium, A., ii, 8. Willy, and Alexander Marckwald, Smith Russell, the radium content of some uranium earths, A., ii, 360.

Marcus, E. See Wilhelm Biltz. Marcusson, Julius. See David Holde.

Mariller, C., boiling point of mixtures of water and [ethyl] alcohol, A., i, 513.

laws of distillation of liquid binary mixtures, A., ii, 254.

binary liquid solutions, A., ii, 583. Marino, Luigi, and C. Porlezza, luminosity of phosphorus: lecture experiments, A., ii, 594.

Marino, Luigi, and V. Squintani, existence of a new type of dioxides: reaction between selenious acid and manganese dioxide, A., ii, 608.

Marino-Zuco, Francesco, and Ida Foa,

ochrein, A., i, 1049.

Marino-Zuco, Francesco, R. Onorato, and L. Giuganino, biotoxin, A, ii, 1108.

Marino-Zuco, Francesco, and V. Pasquero, clavicepsin, a new glucoside from Secale cornutum, A., i, 1003.

Markoff, I., fermentation processes in the digestive tract of ruminants, A., ii, 810.

Markoff, I., Franz Müller, and Nathan Zuntz, the nitrous oxide method of estimating the quantity of blood in the body, A., ii, 1107.

Markwalder, Joseph. See Emil Abderhalden.

Marlen, van. See Jacob Boeseken.

Maron, David, and D. Salzberg, constitution of the nitro-2:5-dimethylbenziminazole obtained by nitration, A., i, 1032.

Marotta, D., oxidation of phthalacene, A., i, 980.

Marqueyrol, M., estimation of chlorides, chlorates, and perchlorates in a mixture of their salts, A., ii, 652.

estimation of camphor in smokeless powders, A., ii, 774.

Marqueyrol, M., and D. Florentin, nitrous esters of cellulose, A., i, 355. industrial estimation of nitrates and nitric esters, A., 1i, 437.

Marr, Francis S. See Henry Brougham Hutchinson.

Marres, Paul. See Julius Bredt.

Marschall, Oswald. See Paul Rabe.

Marsden, (Miss) Effic Gwendoline, and Samuel Smiles, the synthesis of derivatives of thioxanthone from aromatic disulphides, T., 1353; P., 207.

Marsh, James Ernest, some a'-derivatives of camphor, P., 283.

asymmetry in the supposed absence of an asymmetric atom, P., 317.

solutions of halogen double salts in water and ether, P., 328.

Marshall, Charles Robertshaw, [physiological] action of tetramethylammonium chloride, A., ii, 754.

Theodore. Marshall, J. See Philip Adolph Kober.

Marszalek, J. See Léon Marchlewski. Ermanno. See Guido Martegiani, Bargellini.

Martin, Charles James. See (Miss) # Harriette Chick.

- Martin, Geoffrey, who first suggested that the radioactive elements are elements undergoing decomposition at the ordinary temperature? A., ii, 453.
 - the connexion between the volatility, fusibility, and density of compounds, and the chemical forces at play within their molecules, A., ii, 793.
- Martin, Hilda von, experiments with metallic conductors of very high resistance and the application of the electron theory, A., ii, 177.

Martynowicz, Z., p-xylyl sulphide and its derivatives, A., i, 196.

Marx, Th. See Emil Erlenmeyer.

Maryott, Carlton Howard, use of metallic potassium in estimating the halogens in benzene derivatives, A., ii, 66.

Mascarelli, Luigi, the two forms of decahydro-\$-naphthol (a particular case in stereochemistry), A., i, 964.

Masing, Ernst, chemical studies in blood regeneration, A., ii, 993. the relationship between nuclear ma-

terial and development, A., ii, 1111. Masius, Morton. See Herbert Freundlich. Masloff, A. A. von, a modification of Nakajama's reaction for bile pigment in urine, A., ii, 1144.

Masoni, Giulio, action of manganese sulphate on vegetation, A., ii, 821.

Masslenikoff, A. See Friedrich Kehr-

Massol, Gustave, chemical composition of the gases evolved from the thermal

spring at Uriage (Isère), A., ii, 123.

Massol, Gustave, and A. Faucon, latent heat of fusion and specific heat of fatty acids, A., ii, 852.

Massol, Léon, action of ultra-violet radiations on starch, A., i, 356.

Masson, Georges, the chemical composition of the root of Asclepias vincetoxicum, A., ii, 761.

Masson, James Irvine Orme, the solubility of electrolytes in aqueous solutions. Part I. Solubility of salts in the corresponding acids, T., 1132; P., 125.

the solubility of electrolytes in aqueous solutions. Part II. Solubility of

oxalic acid in other acids, P., 328. Mastbaum, Hugo, aluminium apparatus

for use in the laboratory, A., ii, 106. Masuda, Niro, the excretion of ingested amino-acids in liver diseases involving disturbed metabolism, A., ii, 631.

Mathers, Frank Curry, electro-depo-sition of lead from perchlorate solutions, A., ii, 113.

Mathers, Frank Curry, and Roy S. Bonsib, preparation of ammonium selenate: a new method, A., ii, 603.

Mathers, Frank Curry, and Albert F. O. Germann, mercurous perchlorate voltameter, A., ii., 577.

Mathews, Albert P., and T. H. Glenn, composition of invertase, A., i, 409.

Mathews, Joseph Howard, heats of reaction in non-aqueous solutions, A., ii, 855.

Mathews, Joseph Howard, and Albert F. O. Germann, use of a Dewar flask in measurements of heats of neutralisation, A., ii, 187.

Mathews, Joseph Howard. Theodore William Richards.

Mathewson, C. H., sodium-gold alloys, A., ii, 732.

Mathias, Émile, and Heike Kamerlingh Onnes, the rectilinear diameter for

oxygen, A., ii, 387.

Mathison, G. C., action of asphyxia on the spinal animal, A., ii, 123.

the effect of potassium salts on the circulation, with special reference to the production of heart-block, A., ii, 125.

the effects of asphyxia on medullary centres. I. The vaso-motor centre, A., ii, 617.

the effects of potassium salts on the circulation and on plain muscle, A., ii, 758.

Mátignon, Camille, presence of zinc nitride in zinc powder and commercial zincs, A., ii, 605.

Matschurevitsch, Ippolyt, action of magnesium and aliphatic halogen action of derivatives on ethyl chlorocarbon-

ate, A., i, 257. synthesis of β -hydroxy- α -ethylbutyric acid, A., i, 260.

synthesis of aromatic and hydroaromatic alcohols containing the allyl group, A., i, 961.

Matsui, Motooki, alkylation of acid amides, A., i, 185.

iminosulphides. I. The condensation of thiobenzamide with benzonitrile, A., i, 201.

Matthes, Fritz, the ternary systems silver chloride, bromide and iodide, and lead chloride, bromide and iodide, A., ii, 476.

Matthes, Hermann, and A. Dahle, soy bean oil, A., i, 831.
phytosterols of soy bean, A., i,

858.

Matthews, Frank. See James Codrington Crocker.

Matthews, Samuel A. See Joseph L. Miller.

Mattill, H. A., and Philip Bouvier Hawk, utilisation of ingested fat under the influence of copious and moderate water drinking with meals, A., ii, 410.

Mattill, H. A. See also Paul E. Howe. Matton, K. See Paul Pfeiffer.

Mauguin, Charles, sodium derivatives of bromo-amides and their rôle in Hofmann's reaction. A., i, 357.

Mauritz, Bela, zeolites from Nadap, Hungary, A., ii, 46.

Mauthner, Ferdinand, synthesis of glucovanillic acid and of gluco-p-hydroxybenzoic acid, A., i, 647.

synthesis of methyl digallate penta-

methyl ether, A., i, 725.

May, Clarence B. See Hannah Stevens. May, Clarence E., decomposition of uric acid by means of dilute sodium hydroxide solutions, A., ii, 1131.

May, Percy, aromatic antimony compounds. Part II. The action of the chlorides of antimony on aniline and its derivatives, T., 1382; P., 124.

note on the monosodium salt of 1nitroso-2-naphthol-3:6-disulphonic acid, P., 141.

Mayer, Erwin W. See Friedrich Wilhelm Semmler and Richard Will-

Mayer, Friedrich, analysis of graphite, A., ii, 1029.

Mayer, Fritz, diphenyl derivatives, A., i, 869.

Mayer, Josef. See Hermann Staudinger. Mayer, Mario, aldehyde sulphites of vegetable alkaloids, A., i, 223.

Mayer, O. von. See Hartwig Franzen. Mayer, Paul, the destruction of dextrose by light, A., i, 423.

Mayer, W. See Edgar Wedekind.

Mayerhofer, Erns', the clinical importance of E. Goldschmiedt's glycuronic acid reaction in infants' urine, A., ii, 311.

Mayr. See Schülke.

Pierre, induced maturation of Mazé. grains; antigerminative action of acetaldehyde, A., ii, 141.

excretion of mineral and organic substances by roots and stomata, A., ii, 324.

influence on plant development of mineral substances accumulating in the organs as residues from assimilation; absorption of colloidal organic matter by the roots, 424.

Mazé, Pierre, phenomena of fermentation are actions of digestion; study of denitrification in the vegetable kingdom, A., ii, 518, 642.

formation of nitrous acid in the living cell, A., ii, 643.

formation of nitrous acid in the vegetable and animal cell, A., ii, 918. experimental chlorosis of maize, A., ii, 1126.

Mazoué, (Mlle.) B. See A. Chauchard. Mazzotto, Domenico, the nature of the transformation of lead-tin alloys in the solid state, A., ii, 889.

Mazzucchelli, Arrigo, complex derivatives of molybdic acid, A., i, 10. index of refraction of binary mixtures,

A., ii, 781. transport numbers and molecular com-

plexity, A., ii, 962. Mazzucchelli, Arrigo, and Mario Borghi, complexes of permolybdic and pertungstic acids with active organic acids, A., i, 11.

Mdivani, B., estimation of tungsten, A., ii, 230.

Mears, B. See Harmon Northrop Morse. Medigreceanu, Florentin, and L. Kristeller, general metabolism with special reference to mineral metabolism in a patient with acromegaly complicated

with glycosuria, A., ii, 417.

Medigreceanu, Florentin. See also Phobus A. Levene.

Medvedeff, An. K., deamidation in the

blood in normal animals, and in those deprived of the thyroid, A., ii, 739.

Meerburg, Pieter Adriaan, the ternary system potassium sulphate, copper sulphate, and water below 50°, A., ii, 380.

Meier, A. See Reginald Oliver Herzog. Meisenheimer, Jakob, and Leo Lichtenstadt, optically active compounds of phosphorus, A., i, 344.

Meitner, Lise. See Otto von Baeyer and J Franck.

Meldola, Raphael, the question of isomerism between naphthiminazoles, P.,

Meldola, Raphael, and Harold Kuntzen, syntheses with phenol derivatives containing a mobile nitro-group. Part III. Complex iminazoles, azo-compounds, and azides, 36.

syntheses with phenol derivatives containing a mobile nitro-group. Parts IV. and V. Quinone-imides; asymmetric quaternary ammonium compounds and asymmetric carbinols, T., 1283, 2034; P., 157, 263. Meldrum, Andrew Norman, substances related to cochenillic and carminic Part I. Synthesis of the acids. methyl ether of β - and of γ -coccinic acid, T., 1712; P., 216.

the development of the atomic theory. II. The various accounts of the origin of Dalton's theory. III. Newton's theory, and its influence in the eighteenth century, A., ii, 267.

the development of the atomic theory. IV. Dalton's physical atomic theory. V. Dalton's chemical theory. the reception accorded to the theory advocated by Dalton, A., ii, 708.

Meldrum, William Buell, influence of alkyl substituents on the electrical conductivity of malonic acid, A., ii,

692.

Mellecœur, R., thermo-calorimetric mea-

surements, A., ii, 851.

Mellet, Rodolphe, estimation of nicotine in tobacco and in green plants of Nicotiana tabacum, A., ii, 672.

Mellor, Joseph William, and A. D. Holdcroft, the chemical constitution of the kaolinite molecule, A., ii,

Meltzer, Samuel James, migration of solutions in bodies deprived of the cardiac circulation, A., ii, 220.

Meltzer, Samuel James. See also Don R.

Joseph.

Mendel, Joh., decomposition of different sugars by bacteria, A., ii, 318.

Mendel, Lafayette Benedict, and Morris Seide Fine, studies in nutrition. I. The utilisation, of the proteins of wheat, A., ii, 1109.

studies in nutrition. II. The utilisation of the proteins of barley, A., ii,

Mendel, Lafayette Benedict, and William Cumming Rose, mucic acid and carbohydrate metabolism, A., ii,

creatine and creatinine. I. The rôle of the carbohydrates in creatinecreatinine metabolism, A., ii, 1002.

creatine and creatinine. II. Inanition and the creatine content of muscle, A., ii, 1007.

Mendel, Lafayette Benedict. See also

Henry Lord Wheeler. Mendenhall, C. E. See O. P. Watts.

Meneghini, D. See Giuseppe Bruni. Menge, Otto, the binary systems of magnesium and calcium chlorides with the chlorides of potassium, sodium, silver, lead, copper, zinc, tin, and cadmium, A., ii, 982.

Menschutkin, Boris N., the systems aluminium bromide and ethylene dibromide, A., i, 1.

compounds of aluminium chloride and bromide with acid chlorides, A., i,

compounds of aluminium chloride and bromide with acetophenone and benzophenone, A., i, 65.

compounds of antimony trichloride and antimony tribromide with benzene,

A., i, 273.

investigation of systems of substituted benzenes with antimony chloride and antimony bromide. I. Halogen-substituted benzene, A., i, 273.

examination of systems of substituted benzenes with antimony trichloride. II. SbCl₃, SbBr₃ and nitrobenzene,

A., i, 274.

the system propylbenzene-antimony trichloride, A., i, 532.

binary systems of which one component is an organic compound and the other an inorganic salt, A., i, 992.

Mentzel, Waldemar. See August Mi-

chaelis.

Menzies, Alan W. C., method for determining the molecular weights of dissolved substances by measurement of lowering of vapour pressure, A., ii, 94.

convenient form of apparatus for the measurement of the vapour densities of easily volatile substances, A., ii,

Menzies, Alan C. W., and N. N. Dutt, the liquidus surface of the ternary system composed of the nitrates of potassium, sodium, and calcium, A., ii, 822.

Menzies, Alan W. C. See also Alexander

Merck, [Carl] Emanuel, preparation of 4imino-5-oximino-2:6-diketopyrimidine and its 3-alkyl derivative, A., i,

preparation of 5:5-dialkyliminobarbituric acids (2-imino-4:6-diketo-5:5-dialkylpyrimidines), A., i, 572, 1035. preparation of 5:5-dialkylthiobarbituric

acids, A., i, 683, 1032.

Merczyng, H., electric dispersion of water and ethyl alcohol for very short waves, A., ii, 574.

Merkin, A., action of hydrazine hydrate on 1-methylcyclohexan-3-one, A.,i, 64.

Merres, Ernst. See Eilhard Alfred Mitscherlich.

Merriman, Richard William, coumaranone derivatives. Part I., T., 911; P., 101.

Merriman, Richard William. See also John Wade.

RobertMertelsmann, Martin. See Behrend.

Merton, Thomas Ralph, the absorption spectra of permanganates in certain solvents, T., 237; P., 66.

Merve, Ch. van der. See Daniel Vorländer.

Mervini, L. See Maurice Padoa.

Meserve, Philip W. See Marshall Perley Cram.

Meslin, Georges, circular double refraction of sodium chlorate, A., ii, 679.

Mestrezat, W., consumption of malic acid and formation of lactic acid during fermentation; independence of the two phenomena, A., ii, 421.

chemical composition of normal cerebrospinal fluid; true nature of this

liquid, A., ii, 811.

Metalnikoff, S., the neutralisation of spermotoxins and alkaloids by extract of the testis and epididymis, A., ii, 217.

Mette, Fr. See Karl Elbs.

Meulen, Henri ter, the sugar in sophorin, A., i, 391.

Meunier, Jean [Alexis], a new property of copper and the rapid combustion of gases without flame, or convergent combustion, A., 205.

modification of the mechanism of flame by convergent combustion, A., ii, 384.

spectra of combustion of hydrocarbons and of different metals, A., ii, 679.

Meunier, Stanislas, chemical and petrological examination of the El Nakhla meteorite, A., ii, 1106.

Meyer, Alfred R. See M. von Pirani. Meyer, André, azo-derivatives of 3phenylisooxazolone, A., i, 341. preparation of mesoxalic esters, A., i,

azomethines derived from phenylisooxazolone, A., i, 687.

Meyer, Ernst [Sigismund Christian] von, preparation of diphenylmethane and its homologues, A., i, 120.

congress of chemists at Karlsruhe in

1860, A., ii, 199.

Meyer, Ernst von, P. Fischer, (Fräulein) Näbe, and A. Nicolaus, triphenylmethyl chloride, diphenylcarbamyl chloride, and cyanuric bromide acting as acid halogenides, A., i, 120. Meyer, Erwin. See Otto Wallach.

Meyer, Friedrich. See Arthur Stähler.

Meyer, Gustave M. See Phæbus A. Levene.

Meyer, Hans, and Alfred Eckert, the oil and wax of coffee beans, A., i, 106.

Meyer, Jacob, preparation of 2:4:6-trinitrobenzene from halogenated trinitrobenzenes, A., i, 848.

Meyer, Julius, isomerism of the three allo-cinnamic acids, A., i, 975.

Meyer, Karl. See Richard Meyer.

Meyer, Kurt, bacterial proteases, A., i, 511.

bacterial anti-proteases, A., i, 512.

Meyer, Kurt H., anthracene. thranol and anthraquinol, A., i,

anthracene. II. Oxidation of anthracene, A., i, 196.

keto-enolic tautomerism, A., i, 350. keto-enolic tautomerism. IV. Ferric

chloride reaction of enols, A., i,

keto-enolic tautomerism. V. motropy of methyl benzoylacetate, A., i, 865.

Meyer, Kurt H., and Paul Kappelmeier, keto-enolic tautomerism. III. Tautomerism of ethyl acetoacetate, A., i, 832.

Meyer, Kurt H., and Heinrich Wieland. absorption spectra of triphenylmethyl and of salts of triphenylcarbinol, A., ii, 952.

Meyer, M. See Stanislaw Tołłoczko, Meyer, Otto. See Emil Abderhalden. Meyer, Paul. See Hans Fischer.

Meyer, Richard [Emil], and Otto Fischer, spectrographic studies in the phthalein group, A., i, 723.

eyer, Richard, and Karl Meyer, phthaleins of 3:5:3':5'-diresorcinol Meyer, (3:5:3':5'-tetrahydroxydiphenyl), A., i, 872.

Meyer, Richard, and Ferd. Posner, composition of phthalein salts, A., i,

Meyer, Richard, and Siegfried Schuster, pyrogenic reactions of carbon dioxide, with carbon disulphide and hydrogen sulphide, A., ii, 721.

Meyer, Richard, and Kurt Wolfsleben, naphtharesorcinol [1:3-dihydroxynaphthalene] and 4-amino-β-naphthol,

A., i, 631.

Meyer, Richard Josef, a scandium-rich orthite from Finland and its alteration, A., ii, 406.

the detection and estimation of thorium by means of iodic acid, A., ii, 825.

Meyer-Betz, Friedrich. See Hans Fischer.

Meyerhof, Otto, the respiration of the eggs of the sea-urchin (Strongylocentrotus lividus) in pure sodium chloride solutions, A., ii, 738.

the heat production in the vital oxidative processes of eggs. I.—II., A.,

ii, 1004.

Meyeringh, W., influence of the alkalinity of the wash-water on the percentage of water in butter, A., ii,

Mezernitzky, P. G., radioactivity of certain Russian mineral springs, A., ii, 960.

Michael, Arthur, and Hans Leupold, course of the intramolecular transformations of alkyl bromides and the question of the cause of equilibrium reversible reactions, 250.

Michaelis, [Carl Arnold] August, Felix Abraham, Fritz Isert, Felix Risse, Thomas, and FriedrichWilhelm Walter, 5-aminopyrazoles and iminopyrines. II., A., i, 1037.

August,HeinrichMichaelis, Boie, Richard Gesing, and Walter Graff, 1-nitro- and 1-amino-derivatives of antipyrine, thiopyrine, and anilopyrine, A., i, 232.

Michaelis, August, Felix Doepmann, \dot{W} aldemar Isert, FritzMentzel. Wilhelm Thomas, Friedrich Walter, and Erich Wurl, substituted iminopyrines, A., i, 1039.

Michaelis, August, and Arwed Günther, diphenylstibine compounds, A., i,

1056.

Michaelis, Leonor, the dissociation of amphoteric electrolytes, A., ii, 577.

Michaelis, Leonor, and Heinrich Davidsohn, trypsin and pancreas nucleoprotein, A., i, 343.

the isoelectric point of genuine and denaturated serum-albumin, A., i,

697.

the influence of hydrogen ion concentration on trypsin action, A., i,

the action of hydrogen ions on invertin [invertase], A., i, 1052.

theory of the isoelectric point, A., ii, 192.

the significance and measurement of the acidity of the gastric juice, A., ii, 505.

Michaelis, Léonor, and Peter Rona, general protein chemistry. III. The denaturation of serum albumin, A., i, 90.

a simple method for the estimation of sugar in blood, A., ii, 73.

Michaelis, Léonor, and Dengo Takahashi. the isoelectric constants of the constituents of blood-corpuscles, and their relationship to hæmolysis by acids, A., ii, 48.

See also Hilary Michaelis, Léonor.

Lachs and Peter Rona.

Michaud, Félix, causes producing a constant temperature variation in the vapour pressure of a liquid, A., ii, **3**71.

Micheels, Henri, Caulerpa prolifera, A., ii, 526.

Michel, Franz, hæmochromogen and the spectroscopic differentiation of carboxyhæmoglobin and oxyhæmoglobin, A., i, 822.

wash-bottle with divided liquid layer, A., ii, 35.

nitrometer appendage flasks, A., ii, 68. a closing contrivance for gas-washing bottles, wash-bottles, etc., A., ii,

a new gas-generating apparatus, A., ii, 200.

an improved form of Heller's test for the detection of albumin, especially in urine, A., ii, 347.

action of metals in the presence of hydrogen peroxide on the reagents

for blood, A., ii, 556. detection of blood by means of leucomalachite green, A., ii, 675.

preparation of indigotin as a laboratory exercise and as a lecture experiment, A., ii, 715.

adjustable electric signal thermometer,

A., ii, 963.
Micheler, Hans. See Alexander Gutbier.
Michiels, Louis, trimethylene [cyclopropane] derivatives, A., i, 62, 459.

Micklethwait, (Miss) Frances Mary Gore. See Gilbert Thomas Morgan.

Miculicich, Miroslav, influence of electrolytes and non-electrolytes on the permeability of red blood-corpuscles, A.,

Miklauz, R. See Franz Wilhelm Dafert. Milarch, Ernst. See Paul Rabe.

Milbauer, Jaroslav, red lead. IV., A., ii, 113.

simple arrangement for reading ordinary burettes, A., ii, 432.

cutting tubes by etching, A., ii,

theory of platinum catalysis with reference to the oxidation of hydrogen by

sulphuric acid, A., ii, 872.

Milbauer, Jaroslav, and Otto Quadrat, ferric sulphate as a standard for titrating potassium permanganate, A., ii, 936.

Miller, Joseph L., Dean D. Lewis, and Samuel A. Matthews, effects of extracts of different parts of the pituitary body, A., ii, 217.

Miller, Moriz. See Edgar Wedekind.

Miller, Norman Harry John. See Alfred Daniel Hall and Henry Brougham Hutchinson.

Miller, Oswald, mercerised cellulose, A., i, 17.

isomerism of naphthaquinone derivatives. I., A., i, 308.

mercerisation of cellulose, A., i, 355. structure of naphthaquinone derivatives. II., A., i, 465.

Miller, William Lash. See T. R.

Rosebrugh.

Millikan, Robert A., the isolation of an ion and the exact measurement of its charge; correction to the law of Stokes, A., ii, 175.

Millikan, Robert A., and Harvey Fletcher, the question of valency in gaseous ionisation, A., ii, 573.

Mills, James E., relation of temperature and molecular attraction, A., ii, 710. molecular attraction. IX. Molecular attraction and the law of gravitation, A., ii, 711.

Mills, James E., and Duncan MacRae, specific heat of carbon tetrachloride and of its saturated vapour, A., ii, 186. the specific heat of liquid benzene and of its saturated vapour, A., ii, 187.

Milo. See Jacob Böeseken.

Miloszewski, P. See Waldemar M. Fischer.

Minami, D., the resorption of gelatin in the small intestine, A., ii, 810.

the action of the enzymes of the stomach, pancreas, and mucous membrane of the small intestine on gelatin, A., ii, 810.

Mines, George Ralph, action of tervalent ions on the heart and on certain colloidal systems, A., ii, 130.

replacement of calcium in certain neuro-muscular mechanisms by allied substances, A., ii, 413.

action of tervalent ions on living cells and on colloidal systems. II. Simple and complex cations, A., ii, 633.

Mines, George Ralph. See also Dorothy Dale.

Minguin, Jules. See Antoine Guntz. Minot, H., constant level water-bath,

A, ii, 714.

Mirande, Marcel, effect of road tarring on vegetation, A., ii, 64.

action on green plants of some substances extracted from coal-tar and employed in agriculture, A., ii, 223. Mitchell, Hugh, the ratios which the amounts of substances in radioactive equilibrium bear to one another, A., ii, 87.

Mitchell, Philip H., and George Smith, the physiological effects of alkaloids of Zygadenus intermedius, A., ii, 911.

Mitscherlich, Eilhard Alfred, the law of the minimum and the conclusions to be drawn from it, A., ii, 760.

Mitscherlich, Eilhard Alfred, and Ernst Merres, error in estimating nitrogen in soil, A., ii, 68.

Miura, Soichiro, the behaviour of ethylene glycol, propylene glycol and glycerol in the animal body, A., ii, 1014.

Miura, Soichiro. See also Carl Neuberg. Mixter, William Gilbert, auric hydroxide formed on a gold anode. Deportment of auric hydroxide when heated, A., ii, 613.

heat of combination of acidic oxides with sodium oxide. VII., A., ii, 966.

Mizzenmacher, Golda. See Filippo Traetta-Mosca.

Modrakowski, Georg. See Otto Cohnheim. Modrzejewski, Josef. See Hermann Staudinger.

Möller, Elof, resolution of pentane-ββδtricarboxylic acid and of a s-dimethylglutaric acid into optically active components, A., i, 12.

Mörner, [Graf] Carl Thore, chemistry of alcapton-urine (homogentisic acid and certain of its derivatives, A., i, 55.

Mohr, Ernst, benzene problem, A., i, 959.
gas analysis by Toepler's pressure

balance, A., ii, 149.

Mohs, Karl. See Carl Tubandt.

Moir, James, new derivatives of diphenoquinone and a new variety of stereoisomerism, P., 226.

Moir, Margaret B., the influence of temperature on the magnetic properties of a graded series of carbon steels, A., ii, 791.

Moles, E., new method of determining the solubility of gases, A., ii, 473. critical solution temperatures of liquids, A., ii, 793.

Moles, E. See also Karl Drucker.

Moneta, Giovanni. See Giuseppe Oddo. Monier-Williams, Gordon W., chemical changes produced in flour by bleaching, A., ii, 1001.

Monnartz, Philipp, iron-chromium alloys and their resistance to acids, A., ii, 610.

Monnier, L., presence of oxalic acid in certain wines, A., ii, 648.

Monnier, R., as ay of calcium cyanamide

["kalk stickstoff"], A., ii, 668.
Monteverde, N. A., and V. N. Lubimenko, formation of chlorophyll in plants, A., ii, 424. See

Harvey Hugh.Montgomerie, Thomas Stewart Patterson.

Montgomery, Jack P., relation of heat of vaporisation to other constants at the boiling temperature of some liquids at atmospheric pressure, A., ii, 965.

Monthule, G., estimation of the obromine

in cafleine, A., ii, 673.

Moody, Herbert R. See Samuel A. Tucker.

Moore, Benjamin, Herbert Eldon Roaf, and Arthur Webster, direct measurements of the osmotic pressure of casein in alkaline solution; experimental proof that apparent permeability of a membrane to ions is not due to the properties of the membrane but to the colloid contained within the membrane, A., ii, 1072.

Moore, Benjamin. See also Edward S. Edie.

Moore, Burton Evans, the separation of the spectral lines of calcium and strontium in the magnetic field, A., ii, 559.

Moore, Charles Watson, a-p-hydroxy-mmethoxyphenylethylamine and the resolution of a-p-hydroxyphenylethylamine, T., 416; P., 42.

the constitution of scopoletin, T., 1043; P., 119.

some derivatives of gelsemine, T., 1231 ; P., 157.

Moore, Charles Watson. See also Frederick Belding Power.

Richard B., and Herman Schlundt, the radioactivity of the thermal waters of the Yellowstone National Park, A., ii, 360.

Moore, William C., aqua regia, A., ii, 719.

qualitative detection of mercury by

Klein's method, A., ii, 771.

Moore, William C. See also Herbert Newby McCoy.

Moorhouse, V. H. K., effect of increased temperature of the carotid blood, A., ii, 739.

W., biological-chemical processes in soils; contribution to the nitrogen question, A., ii, 530.

Mooser, W. See also Paul Liechti. **Moreau**, B., qualitative analysis

complex mixtures of salts, A., ii, 331. Moreau, Edmond, biological investiga-

tion of honey, A., ii, 326. identification and estimation of proteins in honey, A., ii, 347.

Moreau, Georges, ionisation of saline vapours produced by a corpuscular radiation, A., ii, 455.

corpuscular ionisation of saline vapours and the recombination of ions in the flame, A., ii, 686.

Moreau, Léon, and Émile Vinet, lead arsenate in viticulture, and the consumption of fresh and dried grapes, A., ii, 326.

how lead arsenate is eliminated at vintage, A., ii, 529.

Morel, Albert. See Maurice Doyon.

Morgan, Agnes Fay. See Horace Greeley Byers.

Morgan, Gilbert Thomas, and Arthur Clayton, the absorption spectra of the nitration products of dimethyl-ptoluidine, T., 1941; P., 233.

Morgan, Gilbert Thomas, and Evelyn Ashley Cooper, the germicidal action of arsenic and antimony compounds on Bacillus typhosus, A., ii, 519.

Morgan, Gilbert Thomas, and (Miss) Frances Mary Gore Micklethwait, organic derivatives of antimony. Part II. The orienting influence of antimonic substituents in benzene nucleus, T., 2286; P., 274. amino-derivatives of arylsulphon-

anilides and arylsulphon-\$-naphthalides, P., 326.

Morgan, John Livingston Rutgers, the weight of a falling drop and the laws of Tate. III. An apparatus for rapid and accurate determination of the weight of a falling drop of liquid, A., ii, 372.

a simple constant-temperature bath for use at temperatures both above and below that of the room, A., ii,

weight of a falling drop and the laws of Tate. IV. Standardisation of a tip, and the calculation of the surface-tension and molecular weight of a liquid from the weight of its falling drop, A., ii, 584.

Morgan, John Livingston Rutgers, and Jessie Y. Cann, the weight of a falling drop and the laws of Tate. The relationship existing between the weight of the drop, the diameter of the tip from which it falls, and the surface tension of the liquid, A., ii, 699.

Morgan, John Livingston Rutgers, and G.K.Daghlian, weight of a falling drop and the laws of Tate. VI. Drop weights of twenty new non-associated liquids and the molecular weights calculated for them, A., ii, 585.

Morgan, John Livingston Rutgers, and A. McD. McAfee, the weight of a falling drop and the laws of Tate. IX. The drop weights of the associated liquids, water, ethyl alcohol, methyl alcohol, and acetic acid, and the surface tensions and capillary constants calculated from them, A., ii, 857.

Morgan, John Livingston Rutgers, and F. T. Owen, weight of a falling drop and the laws of Tate. X. Drop weights of some further associated and non-associated liquids, and the surface tensions and capillary constants calculated from them, A., ii, 1067.

Morgan, John Livingston Rutgers, and Frederick W. Schwartz, the weight of a falling drop and the laws of Tate. VII. The drop weights of some of the lower esters and the surface tensions and molecular weights calculated from them, A., ii, 698.

Morgan, John Livingston Rutgers, and Edgar G. Thomssen, weight of a falling drop and the laws of Tate. V. Drop weight of fifteen non-associated liquids as found by the use of the new form of apparatus, and the molecular weights calculated for them, A., ii, 584.

Morgen, August, Carl Beyer, and F. Westhausser, utilisation of ammonium acetate and asparagin for maintenance and for production of milk, A., ii, 751.

Morgenroth, Julius, and Ludwig Halberstaedter, the influence of quinine and quinine derivatives on experimental trypanosome infection, A., ii, 219.

Morgenroth, Julius, and Oskar Rosenthal, the action of antimony on experimental trypanosome infection, A., ii, 632.

Morgenstern, Otto, compounds of 3:5dinitro-4-hydroxybenzoic acid with hydrocarbons. II., A., i, 976.

Morozewicz, Józef, calcium carbonate, A., ii, 121.
terminology of alumosilicates, A., ii, 121.

Morrell, George Francis, dihydroterpenylamine, A., i, 914.

Morrell, George Francis. See also Arthur

William Crossley.

Morse, Fred W., soluble carbohydrates

in asparagus roots, A., ii, 324.

Morse, Harmon Northrop, William West Holland, and John Lattimore Carpenter, relation of osmotic pressure to temperature. II. The manometers, A., ii, 375.

Morse, Harmon Northrop, William West Holland, Joseph Christie Whitney Frazer, and B. Mears, relation of osmotic pressure to temperature. I. Manufacture of the cells employed in the measurements, A., ii, 191.

Morse, Harmon Northrop, William West Holland, and Chester Newton Myers, relation of osmotic pressure to temperature. IV. The membranes, A., ii, 473.

Morse, Harmon Northrop, William West Holland, and Emanuel George Zies, relation of osmotic pressure to temperature. III. Regulation of temperature A ii 473.

temperature, A., ii, 473.

Morse, Harmon Northrop, William West Holland, Emanuel George Zies, Chester Newton Myers, William Mansfield Clark, and Eugene Edward Gill, relation of osmotic pressure to temperature. V. The measurements, A., ii, 701.

Moscicki, I., formation of hydrogen cyanide in the high tension electric flame, A., ii, 1057.

Mosebach, Gerhardt. See Franz Sachs. Moseley, H. G. J., and Kasimir Fajans, radioactive products of short life, A., ii, 956.

Mosenthal, Henry de, observations on cotton and nitrated cotton, A., i, 711.

Moser, Ludwig, the preparation and estimation of nitric oxide and its behaviour towards water, A., ii, 598.

estimation of nitric oxide, A., ii, 655.

Moser, Ludwig, and L. Machiedo, separation of strontium from calcium, A., ii, 439.

Mossler, Gustav, and Erich Tschebull, codeine oxide, A., i, 223.

Mostowski, St., glycogenic property of dihydroxyacetone, A., ii, 635.

Moulin, A., reactions of pyramidone, A., ii, 777.

Moulin, M., the recombination of ions produced in gases by a-rays, A., ii, 171.

Moureu, Charles, rare gases of thermal springs and the information yielded by them in regard to radioactivity and the physics of the earth, A., ii, 808

Moureu, Charles, and J. Charles Bongrand, propiolic compounds: cyanoacetylene, C₃HN, A., i, 22.

Moureu, Charles, and Adolphe Lepape, constancy of the ratio of helium to argon in natural gaseous mixtures: explanatory hypothesis, A., ii, 392.

Moureu, Charles, and Adolphe Lepape, spectrophotometric method for the estimation of krypton, A., ii, 439.

ratio of argon to nitrogen in natural gaseous mixtures and its significance, A., ii, 602.

rare gases of coal mine natural gases, A., ii, 1087.

spectrophotometric estimation of xenon; constancy of the xenonargon and xenon-krypton ratios in natural gaseous mixtures, A., ii, 1134.

Moureu, Charles, and Amand Valeur, preparation of isosparteine; action of methyl iodide on the base, A., i, 319. isosparteine; a case of stereoisomerism

of nitrogen, A., i, 319.

sparteine. XXIII. Decomposition of isosparteine α-methylhydroxide, XVXI. Methylisosparteine, A., i, 562.

Moureu, Charles. See also Armand Gautier.

Mouton, Henri. See A. Cotton.

Mozdzenski. See S. Serkowski.

Muckermann, Ernst, formation of 1nitroso-5-phenyl-3-pyrazolidone from cinnamoylhydrazide, A., i, 682.

formation of 1-nitroso-5-methyl-3pyrazolidone from crotonoylhydrazide, A., i, 814.

Mügge, Otto, micro-structure of magnetite, A., ii, 1100.

Müller, Arthur, preparation of the hydrosol of tungstic acid, A., ii, 206. Müller, Carl, distillation arrangement

for ammonia and nitrogen estimations, A., ii, 68.

Mueller, Edward. See Gregory Paul Baxter.

Müller, Erich, preparation of colloidal vanadic acid by a new dispersion method, A., ii, 732.

Müller, Erich, and Otto Diefenthäler, the simultaneous volumetric estimation of iron and vanadium, A., ii, 824.

Müller, Erich, and Paul Koppe, influence of current concentration on the formation of chlorates by electrolysis, A., ii, 797.

Müller, Erich, and Gustav Wegelin, volumetric estimation of ferric salts with permanganate after reduction with zinc, A., ii, 937.

Müller, Erich, Gustav Wegelin, Frederick P. Treadwell, and Otto Diefenthaler, Prussian blue and Turnbull's blue. III.. A.. i. 844.

III., A., i, 844.

Müller, Eugen R. E., estimation of phosphorus in pig iron and cast iron without separation of silicon, A., ii, 1132.

Müller, Franz, Walter Schoeller, and Walther Schrauth, the pharmacology of certain organic mercury compounds; the action of metallic poison, A., ii, 755.

Müller, Franz. See also Emil Aberderhalden and I. Markoff.

Müller, Friedrich, extraction of an aldehydic perfume from pinewood tar, A., i, 897.

Müller, Friedrich C. G., electrolysis of aqueous ammonia, A., ii, 598.

Müller, Fritz. See Richard Willstätter.

Müller, Hans Eduard. See Richard
Willstätter.

Müller, Hugo, the occurrence of alizarin in thubard, T., 967; P., 101.

Müller, Karl. See Karl Auwers.

Münchmeyer, Georg. See Otto Mumm. Müntz, Achille, and E. Lainé, loss of

nitrogen during the purification of water by bacterial beds, A., ii. 421. purification of sewage by the soil and by bacterial beds, A., ii, 639.

utilisation of sewage waters in agriculture, A., ii, 764.

Mulder, Eduard, chemical composition of matter. III., A., ii, 33.

Muller, John Hughes, the action of salicylic acid on the metallic acids, A., ii, 940.

Muller, Joseph Auguste, velocity of decomposition of dissolved dithionic acid, A., ii, 266.

acid, A., ii, 266. catalysis in a homogeneous system, A., ii, 266.

Mumm, Otto, and Georg Münchmeyer, conversion of hydroxymethyleneacetophenone into benzoylpyruvic acid and some new derivatives, A., i, 79

2:3-diketo-5-phenylpyrroline, a uninuclear analogue of isatin, A., i, 79.

Muraour, J., peppermint oil prepared from dry leaves of Mentha piperita, A., i, 138.

Murat, Marcel, condensation of menthones with organo-magnesium compounds; synthesis of homologues of menthol, A., i, 890.

Murat, Marcel. See also Alphonse Mailhe.

Murlin, John R., metabolism of development. III. Qualitative effects of pregnancy on protein metabolism in the dog, A., ii, 1004.

Murmann, Ernst, derivatives of 2-phenylquinoline. II., A., i, 157.

estimation of lithium, A., ii, 334, 439. separation of calcium from magnesium, A., ii, 440.

laboratory methods, A., ii, 539.

Murschhauser, Hans, and H. Haffmans, the utilisation of different sugars for the formation of glycogen in the liver, A., ii, 414.

Murschhauser, Hans. See also St. Engel.

Albert George. Mussell, See Albert Ernest Dunstan.

Mutch, N., and Marcus Seymour Pembrey, the influence of tetrahydro-Bnaphthylamine on temperature and respiratory exchange, A., ii, 1017.

Muth, Georg, preparation of aluminium, chromium, and iron formates, A., i,

Muthmann, Wilhelm, and A. Schaidhauf, behaviour of carbon dioxide and of some mixtures of gases in the high tension electric flame, A., ii, 790.

Myers, Chester Newton. See Harmon Northrop Morse.

Myers, James Eckersley. See James Brierley Firth and Alfred Holt.

Mylius, Franz, quantitative gold analysis with ether, A., i1, 444.

Mylius, Franz, and Karl Hüttner, the use of ether in metal analysis, A., ii, 540.

N.

Nacken, Richard, the miscibility of glaserite with sodium sulphate and its dependence on the temperature, A., ii, 109.

Näbe, (Frl.). See Ernst von Meyer. Nagelschmidt, E. See Alfred Wohl.

Nagornoff, Nicolai N., isomorphous mixtures of para-dihalogen derivatives of benzene, A., i, 27.

Nagornoff, Nicolai N., and L. Rotinjanz, a simple direct electrical method of determining heats of vaporisation, A., ii, 965.

Nagornoff, NicolaiSchemtshuschny, and Nicolai Kurnakoff, efflux pressure of isomorphous mixtures of p-dihalogen deriva-tives of benzene, A., ii, 18.

Name, Ralph G. van, and Rowland S. Bosworth, rates of solution of certain metals in dissolved iodine and their relation to the diffusion theory, A., ii,

Nankivell, A. T., the sand-filtration and precipitation of chalk waters, A., ii, 977.

Nanty, the equilibrium between potassium hydrogen carbonate and trihydrated magnesium carbonate, A., ii, 103.

Nanty, action of potassium hydrogen carbonate on magnesium chloride and on soluble magnesium salts in general, A., ii, 282.

Nasini, Raffaele, and Fernando Ageno, solubility of orthoboric acid, its molecular weight, and its transformation

into other hydrates, A., ii, 485. Nastukoff, Alexander M., and K. Maljaroff, action of formaldehyde on petroleum distillates; formation of liquid condensation products, A.,i,249.

Naumoff, W. A. See Wassili W. Scharwin.

Naunton, William Johnson Smith. Siegfried Ruhemann.

Navassart, Emanuel, the influence of alkalis and acids on the autolysis of yeast, A., ii, 141.

influence of antiseptics on yeast autolysis, A., ii, 640.

Navassart, Emanuel. See also Ferdinand Blumenthal.

Neber, P. See Otto Fischer. Neckel, W. See Richard Stoermer.

Neidig, Ray E. See Arthur Wayland Dox.

Nelson, E. K., chemical investigation of the oil of Chenopodium, A., i, 797. capsaicin, the pungent principle of capsicum, and the detection of

capsicum, A., ii, 551.
Nelson, John Maurice. See Kaufman George Falk.

Neogi, Pañchānan, orthophosphoric acid as a dehydrating catalytic agent. Part I. The condensation of acetone in presence of phosphoric acid, T., 1249; P., 71.

trialkylammonium nitrites and nitrites of the bases of the pyridine and quinoline series. Parts I. and II., T., 1252, 1598; P., 71, 208.

preparation of the nitrites of the primary, secondary, and tertiary ammonium bases; preliminary note,

P., 242. Neogi, *Pañchānan*, and *Birendra Bhusan* Adhicary, preparation of ammonium nitrite by the sublimation in a vacuum of a mixture of ammonium chloride and alkali nitrites, T., 116.

preparation of phenylnitromethane [ω-nitrotoluene] by the action of mercurous nitrite on benzyl chloride, A., i, 120.

reactions in the presence of nickel; (a) inability of nitrogen and hydrogen to combine in presence of nickel; (b) reduction of oxides of nitrogen, sulphur, and phosphorus in presence of nickel, A., ii, 107.

Neovius, Werner. See Roland Scholl. Neresheimer, Karl. See Carl Dietrich Harries.

Nernst, [Hermann] Walther, specific heat at low temperatures. III.,

A., ii, 368.

theory of specific heats and the application of the doctrine of definite increments of energy to physical chemical questions, A., ii, 464.

the energy content of solid substances,

A., ii, 964.

Nernst, Walther, and F. A. Lindemann, specific heat at low temperatures. ., A., ii, 466.

specific heat and the theory of finite increments of energy, A., ii, 1059.

Neubauer, Ernst, and Otto Porges, the inefficiency of the suprarenals in cases of phosphorus poisoning, A., ii, 637.

Neubauer, Otto, and Konrad Fromherz, degradation of amino-acids of fermentation with yeast, A., i, 201.

Neubauer, Otto, and Otto Warburg, a synthesis with acetic acid in the artificially perfused liver, A., ii, 53.

Neuberg, Carl, the pentose from the pancreas, A., i, 97.

Neuberg, Carl, and Arnold Hildesheimer, sugar-free yeast fermentation. I., A., ii, 320.

Neuberg, Carl, and Laszló Karczag, lecture experiment: the fermentation of pyruvic and oxalacetic acids, A., ii, 976.

fermentations with yeast in absence of III., A., ii, 1019. sugar.

fermentations with yeast in absence of sugar. IV. A new enzyme in yeast-

carboxylase, A., ii, 1020.
fermentations with yeast in absence
of sugar. V. Carboxylase, A., ii,

Neuberg, Carl, and E. Kretschmer, preparation of phosphoric acid esters of carbohydrates and of glycerol, A., i, 837.

p-cresolglycuronic acid, A., i, 875.

Neuberg, Carl, and Soichiro Miura, the hydrolytic action of hydrogen peroxide, A., i, 935.

Neuberg, Carl, and Sumio Saneyoshi, the behaviour of stereoisomeric tartaric acids in the dog's organism, A., ii, 1016.

detection of small quantities of disaccharides, A., ii, 1036.

detection of small quantities of glycuronic acid as osazone, A., ii, 1058. **Neuberg**, Carl, and L. **Tir**, fermentations

with yeast in the absence of sugar. II., A., ii, 520.

Neumann, H. See Robert Kremann. Neumann, M. See Enos Ferrario.

Neumann, R., estimation of fat in feeding-stuffs by means of trichloroethylene, A., ii, 1040.

Newman, Sidney Herbert. See Martin Onslow Forster.

Ney, N., estimation of cantharidin in cantharides and its tincture, A., ii,

Ney, W., estimation of arsenic in toxicological analysis, A., ii, 932.

Nicholson, J. W., the number of electrons concerned in metallic conduction, A., ii, 836.

Nicodemus, O., pyrogenic decomposition of s-tetrachloroethane and trichloroethylene, A., i, 345.

Nicolas, *Emile*, peroxydase of cow's milk and the p-phenylenediamine reaction, A., ii, 556.

Nicolaus, A. See Ernst von Meyer. Nicolet, Ben H. See Henry 1

See Henry Lord Wheeler.

Niedzwiedzki, Julian, amber from the Galician Carpathians, A., ii, 497.

Niementowski, Stefan von, oxido anhydro-compounds. I., A., i, 85.

Nierenstein, Maximilian, tannins. IV. galloyl-ellagic acid, A., i, 382.

estimation of tannin by means of casein, A., ii, 236.

transformation of proteins into fats during the ripening of cheese, A., ii,

Nierenstein, Maximilian. See also K. C. R. Daniel, Francis Ernest Francis, and C. H. H. Harold.

Nietzki, Rudolf, nitranilic acid [3:6-dinitro-2:5-dihydroxy-p-benzoquinone], A., i, 69.

Nietzki, Rudolf, and Kesselring, quinol diisobutyl ether, A., i, 39.

Nikitin, I. V.See Alexei E. Tschitschibabin.

Nissenmann, L. See Eduard Kurowski. Niviere, Jean, action of isobutylamine and diisobutylamine on a-bromobutyric acid, A., i, 616.

Noelting, Emilio, and Alex. Herzbaum, condensation products of isatic acid and hydroxythionaphthen, indandione, and indanone, A., i, 917.
Noelting, Emilio, and O. R. Steuer,

quindoline and "thioquindoline," A., i, 165.

Noga, Eugen, apparatus for maintaining the level of a liquid, A., ii, 875.

Noll, Alfred, chemical and microscopical investigation on fat transport through the intestinal wall during absorption, A., ii, 128.

Noll, Hermann, estimation of organic matter in waters by means of permanganate, A., ii, 925.

Nolly, H. de, rapid estimation of total carbon [in iron and steel], A., ii, 937.

Noot, (Mlle.) L. van der, determination of the surface tension at the contact of two liquids, A., ii, 859.

Noot, (Mlle.) L. van der. See also Jules Emile Verschaffelt.

Nordenskjöld, Ivar, the pegmatite of Ytterby, Sweden, A., ii, 296.

Norris, Dorothy. See Arthur Harden.
Norris, James F., Ruth Thomas, and B.
Marion Brown, action of metals on
aromatic keto-chlorides and the
properties of compounds of the type
R₂CCl CClR₂, A., i, 31.

North, H. B., action of sulphuryl chloride on certain metals, A., ii, 798.

Norzi, G. See C. Porlezza.

Nothnagel, Günther, estimation of calcium and magnesium in hard water, A., ii, 1031.

Noyes, Arthur Amos, C. R. Boggs, F. S. Farrell, and M. A. Stewart, effect of salts on the solubility of other salts, A., ii, 1074.

Noyes, Arthur Amos, and William Crowell Bray, effects of salts on the solubility of other salts, A., ii, 1074.

solubility of other salts, A., ii, 1074.

Noyes, Arthur Amos, and Kaufman George Falk, properties of salt solutions in relation to the ionic theory.

II. Electrical transference numbers, A., ii, 861.

Noyes, Arthur Amos, and Robert H.
Lombard, the conductivity and ionisation of a penta- and a hexa-ionic salt,
A., ii, 864.

Noyes, William Albert, and A. W. Homberger, molecular rearrangements in the camphor series. VI. isoCampholactone, A., i, 110.

Noyes, William Albert, and Luther Knight, molecular rearrangements in the camphor series. VII. Derivatives of isocamphoric acid; l-hydroxydihydrocampholytic acid, A., i, 111.

Nunez, Vasco Emilio. See Clarence Frederic Hale.

Nuttall, J. M. See Hans Geiger.

Nuttall, Walter Harold. See William Francis Cooper.

Nydegger, Otto, estimation of chromium in chrome iron ore, A., ii, 773.

Nyman, Max, and Richard Björkstén, basic bismuth salicylate, A., i, 449.

precipitation of cocaine solutions with platinum chloride, A., ii, 235.

O.

Obermaier, Carl Julius. See Alexander Gutbier.

Obermiller, Julius, phenol-m-sulphonic acid and its isolation; its non-formation from phenol and sulphuric acid, A., i, 442.

[orientation in the benzene nucleus], A., i, 960.

the reactivity of benzene substituents and the acidity of aromatic acids in their dependence on orientating influences; the structure of benzene, A., i, 963.

Ochsner, Paul. See Fritz Ullmann. O'Connor, James M. See Oskar Gros.

Oddo, Bernardo, action of thionyl chloride and of sulphur dioxide on magnesium alkyl halides, A., i, 286.

supposed action of organo-magnesium compounds on the vinyl group of the cinchona alkaloids and of styrene, A., i, 433.

synthesis in the indole group. I. Alkylindoles, A., i, 486.

transpositions with the organo-magnesium compounds. I., A., i, 488. estimation of active hydrogen in organic molecules, A., ii, 826.

Oddo, Bernardo, and Gerolamo Andò, syntheses in the pyrrole group. III. Dipyrroyl and its derivatives, A., i, 496.

Oddo, Bernardo, and G. del Rosso, generalisation of the formation of mixed organo-magnesium compounds with oxygenated compounds, A., i, 443.

oxygenated compounds, A., i, 443. Oddo, Bernardo, and Luigi Sessa, synthesis in the indole group. II. Alkylindolyl ketones and indole acids, A., i, 486.

Oddo, Giuseppe, some derivatives of dicamphor, A., i, 475.

Oddo, Giuseppe, and Giovanni Anelli, molecular weights and constitutional formulæ of nitric and sulphuric acids, A., ii, 717.

Oddo, Giuseppe, Giulio Buzio, Eugenio Ferrari, and Giovanni Moneta, solanidine. V., A., i, 671.

Oddo, Giuseppe, and Marcello Cesaris, solanine extracted from Solanum sodomæum. IV., A., i, 670.

Oddo, Giuseppe, and Guido Cusmano, chloro-ethers. VI. aβ-Dichloro-n-propyl ether, aββ'-trichloro-n-propyl ether, and tetrachloro-n-propyl ether, A., i, 942.

chloro-ethers. VII. Aldehydic condensations by means of halogenated ethers, A., i, 943. Oddo, Giuseppe, Guido Cusmano, Efisio Mameli, and Eugenia Mantovani, catalytic actions of sulphuric acid. I., A., i, 943.

Oddo, Giuseppe, and Anna Mannessier, phosphoryl chloride as a cryoscopic

solvent, A., ii, 1060.

Odell, Allan F., sesquiterpene and an olefinic camphor occurring southern cypress, A., i, 548.

modified Boltwood pump, A., ii, 268. **Odén**, Sven, the preparation of colloidal solutions of sulphur of different degrees of dispersity by fractional coagulation, A., ii, 388.

the significance of the degree of dispersity in the investigation of the general properties of sulphur hydro-

sols, A., ii, 971.

Oechslin, K. J., quinine esters of phenylarsinic acid derivatives, 760.

Oechsner de Coninck, William, action of hydracids in starch. II., A., i,

reactions of metallic oxalates with some salts, A., i, 419.

action of some organic acids on sodium formate. I. and II., A., i, 764.

action of a solution of sodium hydroxide on tricalcium phosphate, A., ii, 396.

action of sodium carbonate on calcium

carbonate, A., ii, 396. determination of the molecular weight of uranous oxide, A., ii, 403, 496. action of (1) potassium hydroxide, (2)

sodium hydroxide solution on calc-

ium carbonate, A., ii, 490. Oechsner de Coninck, William, and Albert Raynaud, dextrin, A., i,

some reactions of calcium oxalate, A., i, 352.

action of (1) hydracids, (2) formic and acetic acids, in increasing proportions, on starch and dextrin, A., i,

423. action of hydriodic acid on starch and

dextrin, A., i, 607. action of oxalic and malonic acids on

starch and dextrin, A., i, 770. action of lactic and tartaric acids on

starch and dextrin, A., i, 771. the dihydrate of uranic oxide, A., ii, 806.

Oeder, Robert. See Carl Ramsauer.

Oertel, R., electrolytic decomposition of

cellulose, A., i, 607.

Oerum, H. P. T., estimation of milk fat by count of the fat globules, A., ii, 943.

Oesterle, Otto A., relationship between chrysophanic acid, aloe-emodin, and rhein, A., i, 887.

Oesterle, Otto A., and W. Sypkens-Toxopéus, constitution of frangula-

emodin, A., i, 887.

Ostling, Gustaf Jim, the influence of three- and four-membered carbon rings on the refractive and dispersive power of organic compounds, P., 315.

Ogilvie, James P., estimation of sucrose in beet sugar factory refuse by Clerget's process, using invertase as hydrolyst, A., ii, 232.

Ohl, A. See Gustav Jantsch.

Ohlsén, H. See Hans von Euler.

Ohmann, O., two experiments on the sulphuration of metals, A., ii, 481.

Ohta, Kohshi, the fat-destroying action of moulds and the behaviour of the fat of organs in putrefaction, A., ii, 321.

Oknoff, M., the internal structure of pearlitic steel, A., ii, 495. the internal structure of martensite and pearlite, A., ii, 986.

Oldenberg, Ludwig, dihydromorphine, A., i, 668.

Oldenberg, Ludwig. See also OttoWallach.

Olivari, F., solubility equilibria between iodine and organic substances, A., ii, 592.

Oliveri-Mandalà, E., condensations of hydrazoic acid with cyanoformic ester and with cyanogen bromide. III., A., i, 337.

some hydroxamic acids of the pyrone

series, A., i, 428.

Oliveri-Mandalà, E., and B. Alagna, action of azoinide on the carbylamines, A., i, 243.

Oliveri-Mandalà, E., and A. Coppola, esterification of the iso-oxazolones with diazomethane, A., i, 492.

Oliveri-Mandalà, E. See also Francesco Carlo Palazzo

Olivier, Simon Cornelis Johannes, formulæ of aluminium salts, A., ii, 206.

Onaka, Morizo, action of arsenic on the red corpuscles, A., ii, 212. oxidation in the blood, A., ii, 409.

Onnes, Heike Kamerlingh, calculation of temperatures, especially below the boiling point of the helium, A., ii,

liquid helium, A., ii, 487. liquid helium. The change of elec-tric resistance of pure metals at IV. The very low temperatures. IV. The [electrical] resistance of pure mercury at helium temperatures, A., ii, 575.

Onnes, Heike Kamerlingh, experiments with liquid helium; change of the electrical resistance of pure metals at very low temperatures. V. Disappearance of the resistance of mercury, A., ii, 687.

experiments with liquid helium; a helium cryostat, A., ii, 853.

Onnes, Heike Kamerlingh, and C. A. Crommelin, isotherms of monatomic gases and of their binary mixtures. VII. Isotherms of argon between + 20° and - 150°, A., ii, 203.

isotherms of monatomic substances and of their binary mixtures. The behaviour of argon with regard to the law of corresponding states, A., ii, 467.

isotherms of monatomic substances and of their binary mixtures. The critical temperature of neon and the melting point of oxygen, A., ii, 854.

Onnes, Heike Kamerlingh, and Albert Perrier, researches on magnetism. III. Para- and dia-magnetism at very low temperatures, A., ii, 694.

Onnes, Heike Kamerlingh. See also Emile Mathias and Pierre Weiss.

See Francesco Marino-Onorato, R. Zuco.

Opit**z**, *H*. See Adolf Windaus.

Oppé, Alfred. See Richard Willstätter. Oppenheim, Kurt.See Ferdinand Blumenthal.

Oppler, Berthold, estimation of chlorides in blood, A., ii, 150.

Orbeli, L. See Joseph Barcroft.

Ordonneau, Charles, destruction of tartrates by fermentation, A., i, 420. estimation of total tartaric acid by the Goldenberg process, A., ii, 77.

Orloff, N. N., synthesis of safranines.

III., A., i, 89. Orndorff, William Ridgely, and Thomas G. Delbridge, tetrachlorogallein and some of its derivatives. II., A., i, 737.

Orth, Ph., viscosity of saccharine solutions, A., ii, 1036.

Orton, Kennedy Joseph Previté, (Miss) Muriel Gwendolen Edwards, Harold King, purification of acetic acid, T., 1178; P., 120.

Orton, Kennedy Joseph Previté, and Harold King, a method of chlorination; chlorination of anilines and phenols, T., 1185; P., 139.

the relation of the velocity of chlorination of aromatic compounds to constitution. Part I. Chlorination of anilides, T., 1369; P., 196. Orton, Kennedy Joseph Previté. See also (Miss) Muriel Gwendolen Edwards and Harold King.

Ortvay, Rudolf, the dielectric constant of certain liquids at high pressures, A., ii, 961.

Osaka, Yukichi, sodium potassium carbonates, A., ii, 723.

Osaka, Yukichi, and Ryuji Abe, solubility of strontium acetate and the transition point of its hydrates, A., i,

Osborne, Thomas Burr, and Herbert Hartley Guest, hydrolysis of casein, A., i, 589.

analysis of the products of hydrolysis of wheat gliadin, A., i, 697.

Osborne, William A., physiological climatology. I. Relation of loss of water from the skin and lungs to the external temperature in actual climatic conditions, A., ii, 124.

Ost, Hermann, cellulose acetate, A., i,

viscosity of cellulose solutions, A., i, 838.

Ost, Hermann, and Th. Brodtkorb, decomposition of dextrose by dilute

sulphuric acid, A., i, 951.

Ost, Hermann, F. Westhoff, and L. Gessner, viscose from cellulose and from starch, A., i, 710.

Ost, Walter. See Otto Wallach.

Osterberg, Emil. See Charles George Lewis Wolf.

Ostrogovich, Adriano, action of amidines on cyanoguanidine, A., i, 332. some new data on the preparation of biguanide, A., i, 429.

action of nitriles on cyanoguanidine, A., i, 507.

action of acetyl chloride on acetylbiuret, A., i, 1036.

Ostromisslensky, Iwan, the analysis of binary compounds by a method based on the law of mass action, A., ii, 195, 476.

Ostromisslensky, Iwan, and Pawel Alabeeff, mechanism of the elimination of halogens by aromatic amines, A., i,

Ostromisslensky, Iwan. See also Th. Zerewitinoff.

Ostwald, Wilhelm, universal chemical language, A., ii, 267.

Ostwald. Wolfgang, the adsorption of electrolytes by sols, A., ii, 374. the colour and degree of dispersity of

colloidal solutions, A., ii, 868. the nature of solvates and the relationships between adsorption and dissociation, A., ii, 1068.

O'Sullivan, Hugh Henry. See Percy Faraday Frankland.

Oswald, Adolf, preparation of 3:5-diiodotyrosine from iodoprotein, A., i, 203.

preparation of 3:5-di-iodotyrosine from iodoproteins. II. The obtaining of the same from iodoglidin, A., i, 372. hydrolysis of sodium "iodeigon," A.,

i, 697.

preparation of β -iodoindole, A., i, 747. remarks on Henze's paper on the history of iodogorgonic acid, A., i, 842.

3:5-di-iodotyrosine from iodised protein. III. From iodocasein, A., i,

Oswald, Marcel, decomposition of silver nitrite by heat, A., ii, 281.

Otin, C. Nicolescu, preparation of lithium

persulphate, A., ii, 1088. Ott, Erwin. See Hermann Staudinger. Otto, Richard, and W. D. Kooper, investigation of nitrogen assimilation by foliage leaves, A., ii, 524.

Otto, Rudolf, preparation of secondary 4-dimethylamino-1-phenyl-2:3-dimethyl-5-pyrazolone citrate, A., i, 926.

Overton, Ernst. See Ivar Bang. Ovitz, F. K. See Horace Chamberlain

Porter.

Owen, F. T. See John Livingston Rutgers Morgan.

Owen, Gwilym, and Harold Pealing, condensation nuclei produced by the action of light on iodine vapour, A., ii, 353.

Owen, Irving L. See Jacob Goodale Lipman.

Oxley, A. E., the magnetic susceptibilities of certain compounds, A., ii, 251.

P.

Paal, Carl, and A. Karl, the influence of foreign substances on the activity of catalysts, A., ii, 479.

Paal, Carl. See also Aladar Skita.

Paderi, Cesare, biological properties of glycuronic acid. I. Amount of glycuronic acid contained in the organism, A., ii, 629. influence of sodium chloride on the

excretion of bromides, A., ii, 1011. Padoa, Maurice, decacyclene and its alleged property of dissolving graphite,

A., i, 362.

Padoa, Maurice, and L. Mervini, influence of impurities on the lower limits of crystallisation, A., ii, 474.

Padoa, Maurice, and L. Santi, preparation and phototropy of certain osazones, A., i, 693.

influence of auxochromes on phototropy, A., i, 1029.

Padua e Castro, J. M. de, new mineral [from Brazil], A., ii, 735.

Paepe, Désiré de, reciprocal solubility of sodium carbonate and sodium hydrogen carbonate in water, A., ii, 489.

Paine, Sydney Gross. See Arthur Harden.

Palache, Charles, and Charles Hyde Warren, parisite, etc., from granitepegmatite at Quincy, Massachusetts, A., ii, 614.

Palazzo, Francesco Carlo, the constitution of the hydroxamic acids, A., i,

Palazzo, Francesco Carlo, and F. Fazio, chloraloxime, A., i, 421.

Palazzo, Francesco Carlo, and Raffaele Liverani, syntheses of pyrazolones from a derivative of γ -pyrone, A., i,

Palazzo, Francesco Carlo, and E. Oliveri-Mandala, oxalo-monohydroxamic acid, A., i, 428.

Palazzo, Francesco Carlo, and G. Scelsi,

the tautomerism of isatin, A., i, 486. Palazzo, Francesco Carlo, and Astorre Tamburini, syntheses of derivatives of 1:8-naphthyridine from a-amino-pyridine, A., i, 327.

Palitsch, Dragomir, an allotropic form of silver, A., ii, 724.
Palladin, Wladimir I., Elise Hübbenet,

and Marie Korsakoff, the action of methylene-blue on the respiration and alcoholic fermentation of living and

killed plants, A., ii, 919.

Palmer, R. C., and Herman Schlundt, dielectric constants of some liquid hydrides, A., ii, 458.

physico-Matti Herman, Palomaa, chemical methods of measurement. I. Transparent thermostat for a wide range of temperature, A., ii,

simplified gravimetric analysis, A., ii,

Palomaa, Matti Herman, and Sulo Kilpi, the preparation of \(\beta\)-alkyloxy- compounds, A., i, 176.

Palozzi, Antoinetto. See Cesare Serono. Pamfil, Georges. See Georges Baume. Pamfil, G. P., qualitative analysis of

metals without employment of hydrogen sulphide or ammonium sulphide, A., ii, 1030.

Pampanini, G. See Giuseppe A. Barbieri.

Paneth, Fritz, intramolecular change of quinidine (conchinine) and of cinchonidine by sulphuric acid, A., i,

Panichi, Ugo, deposit of alunite in the liparite of Torniella in the province of Grosseto, A., ii, 210.

Paniker, Ramni, and Edmund Stiasny, the acid character of gallotannic acid, T., 1819; P., 213.

Panzer, Theodor, biochemistry of protozoa, A., ii, 813.

Paolini, Vincenzo, the isomeric tanacetyl alcohols, A., i, 730.

some derivatives of d-tanacetyl alcohol, A., i, 730.

Poulenc's sodium glycerophosphate and a free glycerophosphoric acid, A., i, 774.

dehydration of the glycols of anethole and isosafrole, A., i, 779.

Pape, K. See E. Bierling.

Pappadà, Nicola, coagulation of copper ferrocyanide, A., ii, 971.

the coagulation and gelatinisation of silicic acid, A., ii, 1077.

Theodor.Pappenhusen, See EmilAbderhalden.

Pariselle, Henri, αβδ-trihydroxybutane: its conversion into furan derivatives and erythritol, A., i, 940.

Parker, H. O. See James B. Garner.

Parkin, John, the carbohydrates of the foliage leaf of the snowdrop (Galanthus nivalis) and their bearing on the first sugar of photosynthesis, A., ii, 1127.

Parravano, Nicola, ternary system silver—tin—lead, A., ii, 281. Parravano, Nicola, and Pietro de Cesaris,

arsenides of tin, A., ii, 613.

Parravano, Nicola, and G. Sirovich, phenomena of crystallisation in ternary systems. I., II., and III. Isomorphous ternary mixtures with a miscibility gap, A., ii, 704.

phenomena of crystallisation in ternary systems. IV. Certain cases of solubility gaps, A., ii, 705.

the thermal analysis of quaternary systems, A., ii, 973, 1078.

Parry, William, synthesis of pinacones. Part I., T., 1169; P., 141.

Parsons, (Hon.) Charles Algernon, and S. S. Cook, the compression of liquids at high pressures, A., ii, 699.

Partington, James Riddick, cholesterol and fatty acids, T., 313; P., 14.

the determination of the dissociation pressures of hydrated salts by a dynamical method, T., 466; P.,

Partington, James Riddick, the temperature-coefficient of the electrical conductivity of hydrogen chloride in alcoholic solution, T., 1937; P., 247.

determination of the vapour pressures of hydrates by a dynamical method; preliminary note, P., 12.

a simple demonstration of Gibbs' phase rule, P., 13.

Partington, James Riddick. See also Robert Taylor Hardman and Arthur Lapworth.

Pascal, Paul, use of the magnetic field as a means of determining constitution in organic chemistry, A., ii, 91, 183, 251, 252, 464, 850, 1058.

magneto-chemical researches on the atomic structure of the halogens, A., ii, 367.

magnetic properties of fluorine, A., ii, 464.

method of optical control for magneto-chemical analyses, A., ii, 679.

Paschen. Friedrich, systems of series in the spectra of zinc, cadmium, and mercury. II., A., ii, 833.

Paschke, F. See Edgar Wedekind.
Paschky, N. P., calculation of specific

heats of simple solutions, A., ii, 851.

Pasquero, V. See Francesco Marino-Zuco.

Passerini, Napoleone, colorimetric method for the estimation of phosphoric acid, A., ii, 535.

Paternò, Emanuele, and Generoso Chieffi, organic synthesis by means of sun-light. V. Behaviour of acids and ethers [including esters] with benzophenone, A., i, 65.

forti, organic syntheses by means of sunlight. VI. The product of the reaction between benzophenone and benzyl acetate, A., i, 66.

Paton, Diarmid Noel, and Edward

Provan Cathcart, mode of production of lactose in the mammary gland, A.,

Patta, Aldo, and Piero Caccia, p-aminophenylarsine tetraiodide, A., i, 1054.

Patta, Aldo. See also Efisio Mameli. Patten, Harrison Eastman, effect of soluble salts on the adsorption of phosphates by salts, A., ii, 1128.

Patten, Harrison Eastman. See also Frank Kenneth Cameron.

Patterson, George Washington, the detection of mercury in explosives, A., ii, 442.

Patterson, Thomas Stewart, and William Collins Forsyth, the velocity of the reaction between iodic and sulphurous acids in various media, P., 320.

Patterson, Thomas Stewart, and Andrew McMillan, rate of transformation of syn- into anti-oximes, A., i, 648.

Patterson, Thomas Stewart, and Harvey Hugh Montgomerie, the influence of neutral solvents on velocity of reaction. Part I. Transformation of anissynaldoxime in various solvents, P., 276.

Paucke, Martin. See Georg Lockemann. Pauli, W. E., ultra-violet and ultra-red phosphorescence, A., ii, 351.

Paulus, J. See Augustin Bistrzycki.

Pauly, Friedrich. See Otto Wallach. Pauly, Hermann, Richard (Freiherr) von Buttlar, and Karl Lockemann, phenolic aldehydes. I. Reactivity of the aldehyde group in phenolic aldehydes, A., i, <u>7</u>85.

Pauly, Hermann, Konrad Schübel, and Karl Lockemann, phenolic aldehydes. II. Reactivity of the phenolic group

in phenolic aldehydes, A., i, 787.

Pauly, Hermann, and Wilhelm Walter, peri-naphthalideacetic acid, A., i, 986. Pavlinova, A. See Alexander IV. Spe-

ransky. Pavy, Frederick William, and William Godden, carbohydrate metabolism and glycosuria, A., ii, 1001.

Pawlewski, Bronislaw, colour and con-

stitution, A., i, 480.

Pawloff, P. N., general phase rule and its application to systems of capillary chemistry, A., ii, 27.

deduction of the general phase theorem for adsorption systems, A., ii, 99. the "precipitation coefficient" of P. P. von Weimarn, A., ii, 261.

condensed disperse systems, A., ii, 263. Pawlowsky, N., action of magnesium p-(or o-)tolyl bromide on dibiomomethyl ether; preparation and properties of xylyl ether, A., i. 442.

Pealing, Harold. See Gwilym Owen. Pearce, R. G. See John James Rickard Macleod.

Peck, Harley Taylor. See Treat Baldwin Johnson.

Peddle, Curil James, and William Ernest Stephen Turner, molecular association in water, T., 685: P., 8.

Pederson, Harald, analysis of materials containing copper, nickel, and cobalt, A., ii, 771.

Pedrazzini, Francesco, detection of arsenic, phosphorus, and antimony in the medical diagnosis of poisoning from these substances, A., ii, 438.

Pekelharing, Cornelis A., creatinine excretion in man under the influence of muscular tonus, A., ii, 1115.

Pekelharing, Cornelis A., and Wilhelm Eduard Ringer, the electrical transport of pepsin, A., i, 1051.

Peklo, Javoslaw, occurrence of starch in sugar-beet roots, A., ii, 763.

Pélabon, Henri, electrical resistance of antimony selenides, A., ii, 575. metallography of selenium—antimony systems, A., ii, 899.

Pelet-Jolivet, Louis, and Hans Siegrist, the adsorption of methylene-blue and crystal-ponceau by carbon in its dependence on the temperature, A., ii,

374.Henri, determination of the Pellet, rotatory power of some organic sub-

stances in presence of lead reagents; inconvenience of distilled water containing carbon dioxide, A., ii, 775. estimation of nitric nitrogen in gun

cotton, nitroglycerol, and similar products, A., ii, 930.

Pellini, Giovanni, and E. Quercigh, gold tellurides, A., ii, 45.

Pellizzari, Guido, action of cyanogen halides on phenylhydrazine. III., A., i, 338.

triazole and its derivatives, A., i, 1035.

1-phenyl-5-methyl-1:2:4-triazole and cyanophenylacetamidine, A., i, 1035.

Pellizzari, Guido, L. Accame, and A. Laria-Botte, derivatives of hydrazodicarbonamide and of urazole, A., i, 336.

Pellizzari, Guido, and C. Cantoni, some derivatives of alloxan, A., i, 337.

Pelly, Russell George. See Ernest Goulding.

Pelz, Erich, production of nitrite by bacteria, A., ii, 139.

Pembrey, Marcus Seymour. Mutch.

Perdue, W. L., and George A. Hulett, cadmium sulphate and the atomic weight of cadmium, A., ii, 397.

exact electrolytic method for estimating metals, A., ii, 433.

Perkin, Arthur George, some oxidation products of the hydroxybenzoic acids. Part III., T., 1442; P., 194. myricetin. Part III., T., 1721; P.,

225. Perkin, William Henry, jun., experiments on the synthesis of the terpenes. Part XVIII. Synthesis of \$\Delta^5-o-menthenol(8), Δ^6 o-menthenol(8), and the corresponding menthadienes, T., 727; P., 95.

Perkin, William Henry, jun., experiments on the synthesis of the terpenes.
Part XIX. Synthesis of cis. and trans-Δ³-o-menthenol(8), Δ⁴-o-menthenol(8), and the corresponding menthadienes, T., 741; P., 95.
Perkin, William Henry, jun., and Wil-

Perkin, William Henry, jun., and William Jackson Pope, optically active derivatives of 1-methylcyclohexylidene 4-acetic acid, T., 1510; P., 212.

Perkin, William Henry, jun., Walter Morrell Roberts, and Robert Robinson, some derivatives of o-veratraldehyde; preliminary note, P., 57.

Perkin, William Henry, jun., and Robert Robinson, synthesis and resolution of gnoscopine (dl-narcotine), T.,

775; P., 101.

Perkin, William Henry, jun. See also Norman Bland, Tsan Quo Chou, (Miss) Bessie Dobson, Walter Norman Haworth, Edward Hope, Frederick Russell Lankshear, and Bernard Dunstan Wilkinson Luff.

Perman, Edgar Philip, the direct action of radium on ammonia, T., 132; P., 7.

chemical action induced by cathode rays and canal rays, T., 833; P., 94. **Permin**, Carl, an automatic pipette, A.,

ii, 221.
Perndanner, Heinrich Felix. See Rudolf
Wegscheider.

Péron, G., pæonol produced by decomposition of a glucoside, A., ii, 426.
Péron, G. See also R. Bernier.

Perrier, Albert. See Heike Kamerlingh Onnes.

Perrin, Jean, determinations of the size of molecules, A., ii, 480. molecular magnitudes, A., ii, 594.

Perrin, R. See Augustin Bistrzycki. Perrot, F. Louis. See Georges Baume.

Pers, Robert, equilibrium between chloropentamminocobalt chloride and aquopentamminocobalt chloride in aqueous solution, A., ii, 1094.

Pescheck, Ernst, the action of some non-protein nitrogenous compounds on nitrogenous metabolism of the carnivora, with special reference to ammonium acetate, A., ii, 1002.

Pestalozza, Ugo. See Roberto Ciusa.

Pestalozza, Ugo. See Roberto Ciusa. Pesthy, Stefan von, fat digestion, A., ii, 742

Peters, Charles A., the reactions in a system of nickel or platinum, mercury, and sodium chloride, A., ii, 1095.

the electrolysis of sodium chloride with the mercury cathode, A., ii, 1136. Peterson, Peter P., stereoisomeric chloroimino-ketones, A., i, 879.

Peterson, W. H. See Edwin Bret Hart.
Petit, Auguste, fixation of phosphoric
acid by organic matter of the soil, A.,
ii, 649.

Petrenko, G, J., and A. S. Fedoroff, alloys of silver and cadmium, A., ii, 281.

the compounds of silver and cadmium, A., ii, 800.

Petrenko-Kritschenko, Pavel Iw., steric hindrance, A., i, 725.

Petrenko-Kritschenko, Pavel Iw., and Joh Schöttle, action of ammonia on benzoyldehydracetic acid, A., i, 1020.

Petri, L., the tannin substances of the roots in the genus Vitis in relation to the disease caused by phylloxera, A., ii, 325.

Petroff, I., naphthenic acids, A., i, 974.

Petrowa, M., compounds of the aromatic series as cholagogues, A., ii, 1010.

Petzsch, Ernst. See Martin Kochmann. Pfaffendorf, W. See Karl Fries.

Pfannl, Michael, intramolecular change of quinidine (conchinine) by sulphuric acid, A., i, 560.

interchange of primary, secondary, and tertiary alkyl groups in the esters of organic acids, A., i, 783.

Pfeifer, S. See Herman Decker.

Pfeiffer, Paul, B. Friedmann, Z. Goldberg, E. Pros, and V. Schwarzkopf, theory of the phenomena of halochromy. II., A., i, 788.
Pfeiffer, Paul, B. Friedmann, R. Lehn-

Pfeiffer, Paul, B. Friedmann, R. Lehnardt, H. Luftensteiner, Rudolf Prade, and K. Schnurmann, the pyridine compounds of the tin halides, A., ii, 746.

Pfeiffer, Paul, Z. Goldberg, and J. Kuntner, lakes. I., A., i, 899.
Pfeiffer, Paul, and K. Matton, stilbene-

o-carboxylic acids, A., i, 448.

Pfeiffer, Paul, R. Prade, and H. Rekate, stannous alkyl derivatives. I., A., i, 595.

Pfeiffer, Paul, and S. Sergiewskaja, paminostilbene, A., i, 438.

Pfeiffer, Theodore, and E. Blanck, sensitiveness of lupines towards lime; behaviour of some other plants towards alkaline and acid media, A., ii, 761.

action of alumina and silicic acid on the utilisation of the phosphoric acid in soils by plants. A. ii. 764.

acid in soils by plants, A., ii, 764.

Pfeiffer, Theodor, E. Blanck, and M.

Flügel, importance of phonolite as potassium manure, A., ii, 764.

Pfeiffer, Theodor, and Kurt Friske, increase of protein during the fattening

of full-grown animals, A., ii, 304. Pfenning, F. See Wilhelm Biltz. Pfenninger, Urs. See Ernst Schulze.

Philippe, E., and H. Duperthuis, physicochemical analysis of wine according to Dutoit, A., ii, 662.

Philippe, E. See also H. Duperthuis and Friedrich Schaffer.

Philippe, Ernst, and Theodore von Fellenberg, detection of thujone [tanacetone] in absinthe, A., ii, 1040.

Philippe, L. H., glucodeconic acids, A., i, 12, 112. glucodecose and a-glucodecitol, A., i,

605.

Philippi, Ernst, synthesis of linear diphthaloylbenzene, A., i, 793.

Philippi, Ernst. See also Zdenko Hanns Skraup.

See Edmond Émile Blaise. Picard, L. Piccard, Jean, holo- and meri-quinonoid salts of benzidine, A., i, 493.

the simplest quinonoid dyes, A., i,

the colorimetric dilution law and its application to triphenylmethyl, A.,

Piccinini, Guido M., biochemical study of manganese. I. Metabolism of manganese and the law of minimum regarding manganese and iron, A.,

biochemical study of manganese. A., ii, 622.

Pick, Ernst Peter. See George Joannovics and Ernst Lowenstein.

Pick, Hans, viscosity of liquid-crystalline mixtures of p-azoxyanisole and pazoxyphenetole, A., ii, 858.

Pick, Hans. See also Friedrich Auerbach. Pickard, Robert Howson, and Joseph Kenyon, investigations on the dependence of rotatory power on chemical constitution. Part I. The rotations of the simplest secondary alcohols of the fatty series, T., 45. note on methyl-n-tridecyl-and methyln-pentadecyl-carbinols and the cor-

responding ketones, P., 312. investigations on the dependence of rotatory power on chemical constitution. Part II. The rotations of some secondary alcohols containing the isopropyl group, P., 324.

Pickard, Robert Howson, and William Oswald Littlebury, the alcohols of the hydroaromatic and terpene series. Part II. The menthols corresponding with optically inactive menthone, P., 324.

Pickering, Spencer [Percival] Umfreville, cupritartrates and analogous compounds, T., 169; P., 7.

potassium cupricarbonates, T., 800;

cuprigly collates, T., 1347; P., 192. copper salts and their behaviour with alkalis, P., 276.

Pickford, Percival. See Nevil Vincent Sidgwick.

Pickles, Samuet Shrowder, composition of the essential oil of Myrica gale, T., 1764; P., 220.

the essential oil of Origanum hirtum,

preliminary note, P., 284. the essential oil of Dalmatian white thyme; preliminary note, P., 285.

Pickles, Samuel Shrowder, and William P. Hayworth, composition of the fat from the seeds of Lophira alata, A., ii, 1024.

composition of Pára rubber-seed oil, A., ii, 1024.

Pickles, Samuel Shrowder, and Bernard Wyndham Whitfeild, the carbohydrate constituents of Para rubber: separation of l-methylinositol; preliminary note, P., 54.

Amé, Pictet, and Alphonse Gams, synthesis of oxyberberine, A., i, 483.

synthesis of berberine, A., i, 807.

Pictet, Amé, and Louis Ramseyer, a constituent of coal, A., i, 850.

Pictet, Amé, and Theodor Spengler,

formation of isoquinoline derivatives by the action of methylal on phenylethylamine, phenylalanine, and tyrosine, A., i, 750.

Pierron, Paul, method for preparing aromatic acylguanidines, A., i, 166.

Piest, C., viscosity of cellulose nitrate solutions, A., ii, 586.

Pietrafesa, Francesco. See Giuseppe

Piettre, Maurice, melanin pigments of animal origin, A., i, 1006.

a mode of resorption of reserve fat, A., ii, 905.

Pighini, Giacomo, the estimation of the enzymatic activity of nuclease by the optical method, A., ii, 236.

the esterase and nuclease content of serum in different forms of insanity, A., ii, 632.

Pigoulewsky, G. See Leo A. Tschugaeff. Pihlblad, Nils, absorption of light by silver hydrosols, A., ii, 1043.

Pilch, F., volumetric analysis with small quantities of liquid, A., ii, 225.

Piloty, Oskar, Paul Eppinger, and Eugen Quitmann, the constitution of the coloured constituent of the pigment of blood, A., i, 92.

See Emil Ab-Pincussohn, Ludwig. derhalden.

Pinnow, Johannes, estimation of quinol, A., ii, 339.

Pinsker, Jacob. See Arthur Rosenheim. Piolti, Giuseppe, synthesis of smithsonite and anglesite, A., ii, 902.

Piotrowski, Henryk. See Fritz Ephraim. Pipereaut, P., and Antony Vila, separation and estimation of zinc, A., ii,

Pirani, M. von, and Alfred R. Meyer. melting point of tantalum, A., ii,

Pirret, (Miss) Ruth, and Frederick Soddy, the ratio between uranium and radium in minerals. II., A., ii, 454.

Pisovschi, Elie E., transformation of naphthalimide into naphthastyril, A., i, 230.

a negative case of indigotin condensation, A., i, 577.

Pissarjewsky, Leo, and I. Litvin, influence of the solvent on the equilibrium constant, A., ii, 12.

Pissarjewsky, Leo, and A. Shapovalenko, electrical conductivity of potassium bromide and potassium silver cyanide in mixtures of glycerol and alcohols, A., ii, 11.

Piutti, Arnaldo, researches on helium. IV. Absorption of helium by salts

and minerals, A., ii, 88.

the presence of helium in autunites and the period of life of ionium, A., ii, 565.

Piutti, Arnaldo, and G. Calcagni, velocities of addition of bromine to the imides of some substituted maleinamic

acids. II., A., i, 124. Pizzorno, P. P., rapid method of estimating uric acid in urine, A., ii,

Pizzuti, G., some derivatives of 3-nitrocumaldehyde, A., i, 62.

Plaats, B. J. van der. See W. H. Julius. Plancher, Giuseppe, and U. Colacicchi, new oxidation of 2-methylindole, A., i,

Plaschke, E. See Max Le Blanc. Plá y Janini, J. M. See Adolf Kauf-

mann. **Plotnikoff**, Joh., photochemical studies; oxidation of iodoform by oxygen, A., ii, 4, 452.

photochemical studies. II. The classification of light reactions, A., ii, 834.

Plotnikoff, Wladimir A., electrical conductivity of non-aqueous solutions. VIII. Aluminium bromide and nitrobenzene, A., ii, 247. Plotnikoff, $Wladimir\ A$. See also W.

A. Izbekoff.

Plummer, George W., the constitution of marcasite and pyrites, A., ii, 901.

lumin-Pochettino, Alfredo, cathode escence in minerals, A., ii, 357. new methods of preparing colloidal

selenium solutions, A., ii, 597. Pöschl, Viktor, pyrites and marcasite,

A., ii, 208.

Pohl, Julius, oxalic acid metabolism, A., ii, 51.

Pohl, Robert, and P. Pringsheim, relationship between chemical affinity and the photoelectric effects of potassium in its compounds, A., ii, 90.

the photoelectric effects of colloidal alkali metals, A., ii, 363.

the selective photoelectric effect for metals outside the alkali group, A., ii, 787.

Pohle, Friedrich. See Otto Wallach.

Poirson, Lucien, the chemical action of sea-water on Portland cement, A., ii, 204.

Poizat, L. See Alphonse Seyewetz. Polak, James Jozef, sulphonation of benzenesulphonic acid, A., i, 30.

Polanyi, Michael, the chemical physical changes in the blood-serum taking place during starvation, A., ii, 741.

the chemistry of hydrocephalic liquid,

A., ii, 746.

Polenske, Eduard, detection of benzoic

acid in foods, A., ii, 1142.

Policard, A. See Maurice Doyon.

Poljansky, E. V. See Anton

See Antony G. Doroschewsky.

Pollacci, Gino, the catalytic action of potassium carbonate on the absorption of nitrogen by calcium carbide, A., i, 358.

Pollacci, Gino. See also Eva Mameli. Pollak, Artur. See Georg von Georgie-

Pollak, Leo, renal glycosuria, A., ii, 417. Pollak, Leo. See also Hans Januschke. Polle, R., influence of different amounts of water, different manures, and consolidation of the soil on the root development of wheat and barley in the first period of growth, A., ii, 224.

Pollitzer, F., determination of specific heats at low temperatures and their use in the calculation of electromotive

forces, A., ii, 180.

Polotzky, A. See Reginald Oliver Herzog

Polowzoff, V., origin of internal pressure in solutions, A., ii, 101.

Poma, G., influence of neutral salts on the velocity of reaction, A., ii,

Poma, G., and G. Gabbi, binary systems of the chlorides of certain univalent metals, A., ii, 606. Ponder, C. W. See R. R. Fasson.

Ponte, G., mesolite from Palagonia, Sicily, A., ii, 298.

Ponzio, Giacomo, conversion of nitroaldehydes into cyanoaldehydes, A., i, 920.

behaviour of some aliphatic iodo-acids in the organism, A., ii, 1015.

Ponzio, Giacomo, and C. Gastaldi, action of nitrous acid on substituted hydrazidines, A., i, 925.

Poole, Horace H., the rate of development

of heat by pitchblende, A., ii, 86.

Pope, Frank George, p-benzoyloxybenzaldehyde, P., 73.

Pope, Frank George, and Hubert Howard, fluorone derivatives, T., 545; P., 52.

Pope, Frank George. See also Hubert Howard.

Jackson, and JohnPope, WilliamRead, dihydroxydihydrindamine and its resolution into optically active components, T., 2071; P., 259. ope, William Jackson. See also Wil-

Pope, William Jackson. liam Henry Perkin, jun.

Popielski, Leo, the action of choline on

blood-pressure, A., ii, 124. the property of urine of reducing the blood pressure, A., ii, 511.

Poppe, Edmond, removal of the constituents of peas by water and aqueous solutions, A., ii, 428.

Popper, N. See Adolf Kaufmann.

Porai-Koschitz, A. E., the connexion between the colour and the structure of organic compounds, A., ii, 3.

Porai-Koschitz, A. E., Y. I. Auschkap, and N. K. Amsler, preparation of Schiff's bases from nitroso-compounds, A., i, 688.

Porcher, Charles. See Paul Sisley.

Porges, Otto, the magnitude of the work of the liver, A., ii, 1008.

Porges, Otto. See also Ernst Neubauer. Porlezza, C., the secondary spectrum of

hydrogen, A., ii, 949.
Porlezza, C., and G. Norzi, secondary spectrum of hydrogen, A., ii, 830. concentration of the radioactive emanation of the gases of boracic suffioni by means of carbon at a low temperature, A., ii, 842.

Porlezza, C., and G. Norzi, the radioactive tufa of Fiuggi; occluded gases; content of radium and uranium, A., ii, 846.

the gas of the boriferous suffioni of Larderello, A., ii, 1106.

Porlezza, C. See also Luigi Marino.

Porter, Agnes Ellen, the identity of pepsin and rennet, A., i, 698.

Porter, Albert E., the inactivation of ferments and the production of antiferments in vitro in the presence of artificial membranes, A., i, 98.

Porter, Alfred William. Senter.

Porter, Charles Walter. See Henry Augustus Torrey.

Porter, Harry Leonard. See William Henry Bragg.

Porter, Horace Chamberlain, and F. K. Ovitz, the volatile matter of coal, A., ii, 201.

Portevin, A., chromium steels, A., ii,

the alloys of iron and antimony, A., ii, 898.

Posner, Ferd. See Richard Meyer.

i, 554.

Posner, Theodor, preparation of substituted cinnamic acids, A., i, 52. constitution of thiophenoquinones and mechanism of quinone reactions, A.,

Posnjak, Georg. See Hans Stobbe. Postnikoff, A. See Leo A. Tschugaeff. Postoéeff, J. J., the influence of saponin on the physiological action of digitoxin, A., ii, 1016.

Potschiwauscheg, Julius. See Roland Scholl

Potter, M. C., electrical effects accompanying the decomposition of organic compounds, A., ii, 913.

Pouget, Isidore, and D. Chouchak, relationship between the fertility of the soil and the contained phosphoric acid soluble in water, A., ii, 145.

colorimetric estimation of phosphoric acid, A., ii, 823.

Pougnet, Jean, action of ultra-violet rays in accelerating chemical reactions and in modifying a state of false equilibrium, A., ii, 85. action of ultra-violet light on the

green husks of vanilla, A., ii, 528. Pound, James Robert, physical properties

of mixtures of ether and sulphuric

acid, T., 698.

Povarnin, G., and A. Sekreteff, the root of the kermek (Statice plumbaginaceæ), A., ii, 64.

Powell, H. W. See Anton Julius Carlson.

Power, Frederick Belding, and Thomas Callan, the constituents of the seeds of Casimiroa edulis, T., 1993; P., 257.

Power, Frederick Belding, and Charles Watson Moore, the constituents of bryony root, T., 937; P., 118. Power, Frederick Belding, and Harold

Rogerson, chemical examination of the root of Ipomæa orizabensis, P., 304.

Power, Frederick Belding, and Arthur Henry Salway, the constituents of Withania somnifera, T., 490; P.,

constituents of Iris versicolor rhizome, A., ii, 143.

Pozzi, G. B. See Temistocle Jona.

Pozzi-Escot, Marius Emmanuel, new rectification tubes, A., ii, 256.

laboratory muffle furnace, A., ii, 269.

rapid detection of elements furnishing sulphides insoluble in dilute acids, A., ii, 940.

extraction apparatus which prevents the formation of emulsions, A., ii, 975.

See B. Erben. Prachfeld, Fr.

Prade, Rudolf. See Paul Pfeiffer.

Prandi, Oreste, and Angelo Civetta, manganese in wine, A., ii, 648.

Prandtl, Wilhelm, and Hermann Manz, the action of calcium fluoride on vanadium pentoxide, A., ii, 990.

Pratolongo, Ugo, citrophosphate solutions. I. Homogeneous equilibrium in aqueous solution studied by the cryoscopic method, A., ii, 865.

adsorption compounds (Van Bemmelen), A., ii, 1069.

Pratt, David Shephard. See Emile

Monnin Chamot.

Pratt, L. A., and Charles James, yttrium potassium oxalate, A., i, 353.

new rare earth compounds, A., ii,

Pratt, L. A. See also Charles James. Pregl, Fritz, and Hans Buchtala, isolation of the individual acids in bile,

A., ii, 1009.

Prescott, William George, and Samuel Smiles, the interaction of aromatic disulphides and sulphuric acid, T., 640; P., 65.

a synthesis of "thioindigo"; preliminary note, P., 317.

Preti, Luigi, muscular work and its relation to ketone formation, A., ii,

Preuss, Georg, gas generation apparatus, A., ii, 975.

Prianischnikoff, Dmitri, influence of calcium carbonate and ammonium sulphate on the assimilation of phosphoric acid from different sources, A., ii, 432.

Pribram, Bruno O., the esterification method and its use in experiments on

metabolism, A., ii, 623.

Pribram, Ernst, cocaine hæmolysis, A., ii, 125.

Pribram, Richard, and Adolf Franke, condensations with ultra-violet light, A., i, 420.

Price, Thomas Slater, and Alfred William Tovey Hyde, adaptation of the tapfunnel to rapid electroanalysis with stationary electrodes, A., ii, 539.

Prideaux, Edmund Brydges Rudhall, the second and third dissociation constants of orthophosphoric acid, T., 1224; P., 121.

relations between critical temperature, boiling point, and expansion coefficient of phosphorus pentachloride, A., ii, 368.

the sodium phosphate standards of acidity, A., ii, 1129.

Priess, Hans, lactones as fish poisons, A., ii, 638.

constituents of Fagara xanthoxyloides, A., ii, 646.

Priestley, Joseph Hubert. See Francis Lawry Usher. Prigent, Georges. See Fernand Malen-

greau. Priglinger, J. See ZdenkoHanns.

Skraup. Prileschaeff, Nikolaus, oxidation of unsaturated compounds with organic peroxides. I., A., i, 255.

oxidation of unsaturated compounds with organic peroxides. II. Oxida-tion of derivatives of unsaturated hydrocarbons with one double linking, A., i, 604.

Pring, John Norman, and Dorian Macefield Fairlie, the synthesis of hydrocarbons at high temperatures, T., 1796; P., 217.

the methane equilibrium, P., 305.

Pringle, *Harold*, the presence of secretin during fœtal life, A., ii, 745.

Pringle, Harold, and John Tait, anticoagulants of frog's blood, A., ii, 739.

Pringsheim, Hans, the assimilation of atmospheric nitrogen by thermophilic bacteria, A., ii, 916.

Pringsheim, P. See J. Franck and Robert Pohl.

Prins, Ada, mixed crystals in liquid crystalline systems and the phase rule, A., ii, 196.

Prins, H. J. See Jacob Böeseken.

Prior, George Thurland. See George Frederick Herbert Smith.

Přiwoznik, Eduard, aqua regia, A., ii, 484.

bismuth ores, A., ii, 991.

Procter, Henry Richardson, the action of dilute acids and salt solutions on gelatin, A., i, 342.

Procter, Henry Richardson, and R. A. Seymour-Jones, acids in tan liquors, A., ii, 76.

the estimation of soluble mercuric salts at great dilutions, A., ii, 541.

Profile, S. C., action of sodium and potassium hydroxides on the optical behaviour of dextrose in solution, A., i, 769.

Prohatzka, N. See Herman Decker. **Promsy**, (Mile.) G., influence of acidity on germination, A., ii, 322.

Pros, E. See Paul Pfeiffer.

Proskurjakoff, A. See Nicolai M. Kij-

Prost, Eugène, the influence of lime on the sulphur content of roasted blendes, A., ii, 283.

Prschevalsky, E. S., oxidation of hexoic and heptoic acids by dilute

permanganate solutions, A., i, 947. Prucha, M. J. See Alfred IV. Bosworth.

Prud'homme, *Maurice*, osmotic pressure, A., ii, 1071.

solubility of sparingly soluble salts, A., ii, 1073.

Prytz. See Hans Jansen.

Przibram, Karl, measurements of the [electric] charge on fog particles, A., ii, 363.

Pschorr, Robert, F. Dickhäuser, and C. D'Avis, methylation of the alcoholic hydroxyl group in morphine, codeine, and the methylmorphimethines, A., i,

Pschorr, Robert, and Georg Knöffler, constitution of morphothebaine. Synthesis of the tetramethoxyphenanthrene derived from morphothebaine, A., i, 669.

Püschel, A., preparation of a sensitive and stable litmus solution, A., ii, 147.

Pugliese, Angelo, muscular work and protein metabolism, A., ii, 624.

Pulvermacher, Georg. See L. Kuttner and Walther Löb.

Pummerer, Rudolf, tautomerism of amidines, A., i, 399.

Pummerer, Rudolf, and Kurt Brass, vat dyes from α-naphthaquinone, A., i, 654.

Pummerer, Rudolf, and Maximilian Goettler, indirubinanils: substances with reactive carbon double bonds, A., i, 231.

immerer, Rudolf, and F. Grube, isatinanils. VI. Cases of desmotrop-Pummerer, ism, A., i, 231.

Purrmann, C., and P. Verbeek, apparatus for the generation of carbon dioxide, A., ii, 878.

Purvis, John Edward, the absorption spectra of some derivatives and isomerides of 1:2-diketo-△3-cyclopentene, T., 107.

the absorption spectra of chlorobenzene and bromobenzene as vapours, as liquids, and in solution, T., 811; P., 71.

the absorption spectra of various chlorine and bromine derivatives of benzene and toluene as vapours, in solution and in thin films, T., 1699; P., 218.

the absorption spectra of triketohydrindene hydrate and certain derivatives, T., 1953; P., 242.

the absorption spectra of various iodine derivatives of benzene and toluene as vapours, in solution, and in thin films, T., 2318; P., 280.

the absorption spectra of the vapours of some sulphur compounds, A., ii,

Pyman, Frank Lee, a new synthesis of 4(or 5-)-B-aminoethylglyoxaline, one of the active principles of ergot, T., 668; P., 91.

the synthesis of histidine, T., 1386; P., 206.

isoquinoline derivatives. Part VI. neo-Oxyberberine, T., 1690; P., 215. aminoalkylglyoxalines, T., 2172; P.,

the synthesis of r-histidine; preliminary note, P., 92.

Pyman, Frank Lee. See also Arthur James Ewins.

Q.

Quadflieg, L. See Karl Bernhard Lehmann.

Quadrat, Otto. See Jaroslav Milbauer. Quagliariello, G., physico-chemical investigations on animal liquids. IV. Technique of the electrometric method for the study of the reaction of the liquids of the organism, A., ii, 962.

physico-chemical investigations animal liquids. IV. Chemical reaction of lymph, A., ii, 1114.

Quagliariello, G., physico-chemical investigations on animal liquids. VII. Chemical reaction of bile, A., ii, 1114.

Quartaroli, Antonio, basic citrates and tartrates of barium, A., i, 176.

an insoluble sodium phosphate and complex compounds of ammonium citrate with alkaline earths, A., ii,

case of autocatalysis and simultaneous negative catalysis, A., ii, 1079.

new method for the preparation of nitrous oxide and its application to the analysis of nitrates, A., ii, 1085. analysis of nitrates, Λ ., ii, 1132.

Quercigh, E. See Giovanni Pellini. Quincke, G. A., a new extraction apparatus, A., ii, 877.

Quitmann, Eugen. See Oskar Piloty.

R.

Rabak, Frank, relation of the odorous constituents of certain plants to plant metabolism. A., ii, 819.

Rabaut, Pierre Charles. See Jules Aloy. Rabe, H., estimation of chlorides in [commercial] bromides, A., ii, 765.

Rabe, Paul, ephedrine and \psi-ephedrine, A., i, 396.

cinchona alkaloids. XV. Partial synthesis of cinchonine, A., i, 742.

Rabe, Paul, and Andrew McMillan,

narcotine and hydrastine, A., i, 77. peculiar relation between the strengths of acids and their activity, A., ii,

Rabe, Paul, and Oswald Marschall, cinchona alkaloids. XIII. Fluorescence phenomena with cinchona alkaloids, A., i, 741.
Rabe, Paul, and Ernst Milarch, cinchona

XIV. Decomposition of alkaloids. oximinoquinotoxine, A., i, 741.

Rabe, Paul, and Charles Roy, mutarotation and electrical conductivity of carbohydrates. I. Dextrose, A., i,

Rabinowitsch, A. G. See Efim Semen London.

Racky, Georg. See Wilhelm Schlenk. Radlberger, Leopold, application of Busch's "nitron" method to the analysis of Chili saltpetre, A., ii, 69.

Radulescu, Dan, synthesis of spyrocyclic compounds, A., i, 458.
nomenclature of the spirans, A., i, 497.

Radwańska, (Mme.) Wanda, the influence of adrenaline on muscular activity, A., ii, 312.

Raffo, M., and J. Mancini, colloidal sulphur, A., ii, 878.

Rafsky, H. R. See Henry Augustus Torrey.

Raiford, Lemuel Charles, chloroiminoquinones, A., i, 993.

chemical examination of woody aster, A., ii, 820.

Raiford, Lemuel Charles. See also Frederick William Heyl.

Raikoff, Paul N., and P. Tischkoff, the influence of the composition and structure of organic acids on the stability of their carboxyl group, A., i, 445.

estimation of manganese as manganous oxide, manganomanganic oxide, and manganese sesquioxide, A., ii, 936.

Rakoczy, A., further observations on rennin and pepsin in the gastric juice of the calf, A., i, 827. plastein formation, A., i, 1050.

Rakowski, Adam W., adsorption. Chemical hysteresis of starches, A., ii, 470.

adsorption. II. Chemical hysteresis, A., ii, 470.

adsorption. III., A., ii, 471.

Rakshit, Jitendra Nath. See Prafulla Chandra Rây.

Rakusin, Michael A., optical investigation of Argentine petroleum, A., i, 761.

optical investigation of petroleum from Southern Bolivia, A., i, 761. quantitative chemical analysis of mixtures by means of differences in density, A., ii, 774.

Ramann, Emil, [colloids in relation to agriculture], A., ii, 52.

Ramsauer, Carl, W. Hausser, and

Robert Oeder, actino-dielectric action in the phosphorescence of the alkalineearth sulphides, A., ii, 238.

Ramsay, (Sir) William, action of niton (radium emanation) on thorium salts, A., ii, 843.

Ramsay, (Sir)William. See also Robert Whytlaw-Gray.

Ramseyer, Louis. See Amé Pictet.

Ramstedt, Eva, the solubility of the emanation of radium in organic liquids, A., ii, 842.

Ranc, Albert. See Henri Bierry.

Randall, Merle. See Gilbert Newton Lewis.

Randolph, C. P. See Eugène Paul Schoch.

Ranfaldi, Francesco, crystallographic examination of some nitrophenylmethylacrylic derivatives, A., i, 129.

Rankin, George A. See Earnest Stanley Shepherd.

Rankine, Alexander Oliver, the relation between viscosity and atomic weight for the inert gases; with its application to the case of the radium emanation, A., ii, 87.

Ransom, Fred, action of caffeine on

muscle, A., ii, 414. Rantscheff, D. See Walther Borsche. Raoult, François. See Maurice Han-

Raquet, Désiré. See Hubert Caron.

Raschig, Fritz, the separation of pchloro-m-cresol (CH₃:OH:Cl=1:3:6) from mixtures of m- and p-cresol, A., i, 537.

preparation of hydroxybenzyl alcohol, hydroxybenzaldehyde, and hydroxybenzoic acids, A., i, 636.

nitrosulphonic acid: "blue acid," A., ii, 200.

chemistry of the lead chamber process, A., ii, 272.

Rassenfosse, André, formation of colloidal copper, A., ii, 41.

Rassow, Berthold, and Arno Becker, VII. hydrazo-compounds. Methylhydrazotoluene, methyltolidine, and ethylbenzidine, A., i, 932. Rassow, Berthold, and Kurt Berger,

VI. Methylhydrazo-compounds. hydrazobenzene and methylbenzidine,

A., i, 821.

Rassow, Berthold, and Fritz Burmeister, hydrazo-compounds. V. Reaction of hydrazobenzene with mixed aldehydes, A., i, 820.

Rathgen, P., lecture experiment on the extinction of burning light petroleum, etc., A., ii, 385.

Rathsmann, E. See Emil Abderhalden. Raulin, G., rapid estimation of nickel in steel, A., ii, 1034.

See Giacomo Luigi Ravenna, Ciro. Ciamician.

Ray, Burton Justice. See William Alphonso Withers.

Rây, Prafulla Chandra, influence of minute quantities of ferric salts and of manganese nitrate on the rate of solution of mercury in nitric acid, T., 1012; P., 4.

Rây, Prafulla Chandra, and Rasik Lal Datta, nitrites of the benzylammonium series: benzylammonium nitrite and dibenzylammonium nitrite and their sublimation and decomposition by heat, T., 1475; P., 127.

Rây, Prafulla Chandra, and Jitendra Nath Rakshit, methylammonium

nitrite, T., 1016; P., 22.

Rây, Prafulla Chandra, and Jitendra Nath Rakshit, nitrites of the alkylammonium bases: ethylammonium nitrite, dimethylammonium nitrite, and trimethylammonium nitrite, T., 1470; P., 71, 122.

trimercuridiethylammonium

T., 1972; P., 220.

nitrites of the alkylammonium series. Part IV. Triethylammonium nitrite and its decomposition and sublimation by heat, P., 264.

nitrites of the alkylammonium series. Part II. Propylammonium nitrite and butylammonium nitrite and their decomposition by heat, P., 291.

Rây, Prafulla Chandra, and Hemendra Kumar Sen, tetramethylammonium hyponitrite and its decomposition by heat, T., 1466; P., 121. the decomposition of tetramethyl-

ammonium nitrite by heat, P., 4. Rayleigh, Lord, Dr. Johnston Stoney's logarithmic law of atomic weights, A., ii, 874.

Albert. See Raynaud, Oechsner de Coninck.

Rea, (Miss) Florence Williamson. Cecil Reginald Crymble.

Reach, Felix, carbohydrate metabolism, A., ii, 743.

the resorption of gelatin from the small intestine, A., ii, 1109.

Read, Arthur Avery. See John O. Arnold. Read, John. See William Jackson Pope. Reboul, G., conductibility accompanying chemical reactions, A., ii, 692.

Rechenberg, C. von, fall of temperature in vapours of high molecular complexity at small pressures, A., ii, 95.

Reckleben, Hans, simple device for use in fitting up a series of absorption flasks, etc., A., ii, 268.

Reckleben, Hans, Johannes Scheiber. and K. Strauss, the recognition of solid arsenic hydride, A., ii, 390. the recognition of a solid antimony

hydride, A., ii, 404.

Reckleben, Hans. See also Johannes Scheiber.

Reddelien, Gustav. See Hans Stobbe. Redfield, Harry Westfall. See Emile Monnin Chamot and Clarence Frederic Hale.

Reed, Howard S., effect of chemical reagents on the respiration and growth of wheat seedlings, A., ii, Ĭ127.

Reed, Howard S., and H. S. Stahl, the erepsins of Glomerella rufomaculans and Sphæropsis malorum, A., ii, 916.

Reeders, J. Chr. See Philipp Kohnstamm.

Reformatsky, J. N., E. Grischkewitsch-Trochimowsky, and A. Semenzoff, Δax-undecadiene and Δao-hexadecadiene, A., i, 597.

Reich, Max, the iron in the urine of domestic animals, A., ii, 1013.

Reichard, C., saponin reactions, A., ii, 235.

glucoside reactions: convallamarin and convallarin, A., ii, 345.

some causes of the formation of colour in inorganic compounds, A., ii, 561. alkaloid reactions: arecoline, A., ii,

778. estimation of silicon in iron containing much graphite, A., ii, 929.

Reichardt, C. J., estimation of indican in the presence of iodides, and their estimation, A., ii, 554.

Reichel, Johannes, the behaviour of Penicillium in the presence of acetic acid and its salts, A., ii, 144.

Reichenheim, Otto. See Ernst Gehrcke. Reicher, Lodewyk Th., a simple automatic stirrer for use with the depressimeter, A., ii, 93.

Reichinstein, David, rate of discharge of

galvanic cells. I., A., ii, 249.

Reid, Ebenezer Emmet, esterification of benzamide and the preparation of N-substituted benzamides, A., i,

hydrolysis of acid amides, A., ii, 477. esterification. IV. Interdependence of limits as exemplified in the transformation of esters, A., ii, 477.

Reid, F. R. See Oswald Schreiner. Reimer, Marie, action of light on esters of a-cyanocinnamylideneacetic A., i, 447.

Reimers, F., estimation of cantharidin in cantharides and its tincture, A., ii, 669. Reinders, Willem, photohalides. and III., A., ii, 39, 490.

influence of the acidity of aqueous solutions on the surface tension of the system water and oil, A., ii, 373.

constitution of the photohalides, A., ii, 490.

Reiner, P., crystallographical examination of inactive ornithine monopicrate, A., i, 815.

Reinganum, Max, Stokes's formula, A., 1i, 104.

ionic mobility in gases. I., A., ii, 788, 837.

variation with temperature of the viscosity of gases of the argon group, A., ii, 858. Reinhard, A., the action of salts on the respiration of plants, A., ii, 141. Reinhard, A. See also W. Zaleski.

Reinhardt, Richard, and Ernst Seibold, the response of the colostral milk of cows to the Schardinger reaction, A., ii, 307.

the Schardinger enzyme in the milk of cows with diseased udders, A., ii, 418.

Reinsberg, Willy. See Robert Behrend. Reinthaler, F., volumetric estimations of mercury based on the reduction to

metal, A., ii, 660. Reis, Alfred, flames containing ammonia and nitric oxide, A., ii, 483.

Reissert, Arnold, chlorination of anaphthol, A., i, 368.

a new method for obtaining acenaphthenequinone from acenaphthene, A., i, 729.

Reissert, Arnold, and Hermann Holle, derivatives of phthalic a id containing sulphur and nitrogen, A., i, 981.

Reitzenstein, Fritz, and Wilhelm Breuning, rupture of the pyridine ring, A., i, 225.
Rekate, H. See Paul Pfeiffer.

Remfry, Frederic George Percy, the condensation of aromatic aldehydes with nitromethane, T., 282; P., 20.

chemical constitution and hypnotic action; acid amides and products of the condensation of malonamides and malonic esters, T., 610; P.,

Remmler, Hans, absorption of arsenic by beetroots, A., ii, 919.

Remy, Theodor, and Georg Rösing, the biological stimulative action of natural humus, A., ii, 758.

Rengade, Etienne. See Alfred Lacroix. Renger, Georg, lead alkyl compounds from methyl ethyl ketone and diethyl ketone, A., i, 188.

Rennie, Edward Henry, and William Ternent Cooke, the interaction of copper and nitric acid in presence of metallic nitrates. Part II., T., 1035; P., 42.

Renning, Julius. See Wilhelm Schlenk. Renouf, (Mis)Nora.See Arthur IVilliam Crossley.

Repiton, Fernand, volumetric estimation of sulphuric acid or sulphates, A., ii, 331.

Report of the Committee of the British Association on the study of hydroaromatic substances, A., i, 725.

on isomorphous sulphonic derivatives of benzene, A., i, 713.

84

c. ii.

Report of the Committee of the British Association on the transformation of aromatic nitroamines and allied substances, and its relation to substitution in benzene derivatives, A., i, 713.

on dynamic isomerism, A., ii, 786. on gaseous explosions, A., ii, 792.

on gaseous combustion, A., ii, 799. on anæsthetics, A., ii, 814.

on electromotive phenomena in plants, A., ii, 817.

on electroanalysis, A., ii, 824. on solubility, A., ii, 794.

Report of the International Committee on atomic weights, 1912, T., 1867; P., 202.

Reuss, Anton. See Alfred Heiduschka. Reuss, Fritz. See Hans Stobbe.

Reutter, analysis of a resin from an Egyptian sarcophagus, A., i, 897.

Reverdin, Frédéric, action of concentrated sulphuric acid on some aromatic nitroamines. II. Derivatives of methylaniline, methylp-anisidine, and methyltoluidines, A., i, 123.

nitration of o-, m-, and p-nitrobenzoyl-

p-anisidines, A., i, 776.

Reverdin, Frédéric, and Armand de Luc, comparative nitration of mono- and di-acylated aromatic amines, A., i,

constitution of Weselsky and Benedikt's dinitroquinol methyl ether; preparation of some methyl derivatives of the dinitro-p-anisidines, A., i, 965.

Revutsky, (Mlle.) E. D. See Wladimir I. Vernadsky.

Rewald, Bruno, the pentose from the pancreas, A., i, 97.

Reychler, Albert, absorption of carbon dioxide and sulphur dioxide by caoutchouc and by blood charcoal, A., ii, 19.

electrophoresis of lampblack, A., ii, 250.

Reynolds, Grace Potter, reaction between organomagnesium compounds cinnamylidene esters. III. Reactions with the isomeric methyl esters of cinnamylideneacetic acid, A., i, 860.

WilliamColebrook,Reynolds, William Henry Taylor, the decomposition of nitric acid by light, P., 306.

Rhead, Thomas Fred Eric, and Richard Vernon Wheeler, the effect of temperature and of pressure on the equilibrium $2CO \rightleftharpoons CO_2 + C, T., 1140; P., 126.$

Rheinberger, E. See Alfred Heid-

uschka.

Ribaut, Henri, estimation of aconitine with silicotungstic acid, A., ii, 551.

Rich, (Miss) Elizabeth Mary. William Arthur Knight.

Richard, A. H., pinacolin derivatives, A., i, 6.

dimethyldipentene produced by the dry distillation of dimethylcaoutchouc, A., i, 733.

Richards, Theodore William, Faraday lecture: the fundamental properties of the elements, T., 1201; P.,

possible solid solution of water in

crystals, A., ii, 589.

Richards, Theodore William, and Otto Hönigschmid, revision of the atomic weight of calcium. I. Analysis of calcium bromide, A., ii, 112.

revision of the atomic weight of calcium. II. Analys chloride, A., ii, 204. II. Analysis of calcium

Richards, Theodore William, and George Leslie Kelley, transition temperatures of sodium chromate as convenient fixed points in thermometry, A., ii, 695.

Richards, Theodore William, and Joseph Howard Mathews, method for determining heat of evaporation as applied

to water, A., ii, 697.

Richardson, Owen Willans, the positive thermions emitted by the alkali sulphates, A., ii, 9.

the positive thermions emitted by the salts of the alkali metals, A., ii,

positive ionisation from hot salts, A., ii, 1051.

Richardson, Owen Willans, and Hereward L. Cooke, the heat liberated during the absorption of electrons by different metals, A., ii, 358.

Richardson, Owen Willans, and R. C. Ditto, diffusion of neon through hot

quartz, A., ii, 1087.
Riche, J. A. See Francis Gano Benedict and L. E. Emmes.

Richmond, Henry Droop, polarimetric estimation of lactose, A., ii, 73. the degree of accuracy with which proteins can be estimated in milk by formaldehyde titration, A., ii, 236.

Richter, Andrei Alexandr, the death of plants at low temperatures, A., ii, 64.

Richter, E. See Wilhelm Lenz.

Richter, M. M., oxonium hydrosulphides of p-benzoquinone, A., i, 135.

constitution of quinhydrone-like substances, A., i, 136. constitution of alloxantin, A., i, 756.

Richter, R., estimation of sulphur dioxide in white wines, A., ii, 330. assay of paraldehyde, A., ii, 776. Ridsdale, Charles H., and N. D. Rids-

dale, mechanicalising analysis as an aid to accuracy and speed, A., ii, 1133.

Ridsdale, N. D. See Charles H. Ridsdale.

See Carl Tubandt. Riedel, W. Rieger, J. B. See William Salant.

Riegger, Harold Eaton, oxidation of hydrazoic acid [azoimide], A., ii, 978. Rieke, Reinhold, and K. Endell, lithium

silicates, A., ii, 490, 982.

Riera y Punti, José. See Friedrich Kehrmann.

Ries, A., chemico-crystallographic examination of the platinichlorides, platinibromides, stannichlorides, and stannibromides of quaternary monium bases, A., i, 953.

Riesenfeld, Ernst Hermann, catalysis of hydrogen peroxide, A., ii, 107.

Riety, L, electromotive force produced by the flow of copper sulphate solution through a capillary tube, A., ii, 575.

Riffart, H. See Alfred Heiduschka. Riiber, C. N., Δ^3 -butenylbenzene, A., i,

oxidation of allo-cinnamylideneacetic

acid, A., i, 860. addition of hydrogen bromide to cinuamylidenemalonic acid, cinnamylideneacetic acid, and phenylbutadiene, A., i, 979.

Rimbach, Eberhard, H. and polarimetric determination of avidity of weak bases in non-aqueous solutions.

A., ii, 869.

Rinati, Guido Verona, application of the Benedikt-Zigmondy process for the estimation of glycerol in wine, A., ii, 545.

Rinckleben, P., extraction of zymase from fresh brewers' yeast by plasmoly-

sis, A., i, 1054.

Ringer, A. I., the maximum production of hippuric acid in animals, with consideration of the origin of glycine in the animal body, A., ii, 1116.

Ringer, Wilhelm Eduard, the fixing of acids by egg-albumin and viscosity,

A., i, 406.

quadriurates, A., i, 1044.

rapid measurement of the concentration of the hydrogen ions in liquids, A., ii, 363.

Ringer, Wilhelm Eduard. See also (Fraulein) H. A. van Herwerden and Cornelis A. Pekelharing.

Rinkes, I. J.See Arnold Frederik Holleman.

Rinne, Fritz, and R. Kolb, optical characters of the α - and β -modifications of quartz and leucite, A., ii, 209.

composition and occurrence of rinneite, A., ii, 613.

Ripke, Otto, synthesis of pentamethylenediguanidine, A., i, 620.

Ripke, Otto. See also Reginald Oliver Herzog.

Risse, Felix. See August Michaelis.

Ritter, Friedrich. See Otto Wallach.

Ritter, Georg, nitrogen nutrition Leguminosæ, A., ii, 428.

Ritter, H. See Aladar Skita.

Ritzel, Albert, crystal-habit of sodium chloride in relation to the solvent, A., ii, 488.

Rivett, Albert Cherbury David. (Miss) Stella Deakin.

Roaf, Herbert Eldon, carbon dioxide output during decerebrate rigidity, A., ii, 503.

Roaf, Herbert Eldon. See also Edward S. Edie, C. H. H. Harold, and Benjamin Moore.

Robel, J. See Léon Marchlewski.

Roberts, Edwin Jay, separation of cerium by potassium permanganate, A., ii, 541.

Roberts, Norman, and F. Alex. McDermott, crucible furnace, A., ii, 385. handy burette holder, A., ii, 875.

Roberts, Percival Rudolph, and Gellert Alleman, action of ethyl alcohol on toluene-p-diazonium chloride and of sulphuric acid on p-tolyl ethyl ether, A., i, 369.

Roberts, Walter Morrell. See William Henry Perkin, jun.

Robertson, Thorburn Brailsford, electrochemistry of proteins. III. Dissociation of salts of ovimucoid in solutions of varying alkalinity and acidity, A., i, 91.

the refractive indices of certain proteins. III. Serum globulin. IV. Casein in alcohol-water mixtures,

A., i, 341.

electrochemistry of proteins. Dissociation in solutions of the globulinates of the alkaline earths, A., i, 406.

electrochemistry of proteins. electrochemical equivalent of caseinogen and its relation to the combining and molecular weights of caseinogen, A., i, 407.

theory of the action of inorganic salts on proteins in solution, A., i,

695.

Robertson, Thorburn Brailsford, electrochemistry of proteins. VII. The mode of formation and ionisation of the compounds of proteins with inorganic acids and bases, A., i, 933. electrochemistry of proteins. VI. The

conductivities of solutions of the caseinogenates of potassium and of the alkaline earths in mixtures of water and alcohol, A., ii, 460.

Robertson, Thorburn Brailsford, and Henry Chalmers Biddle, the composition of certain substances produced by the action of pepsin on the products of the complete peptic hydrolysis of casein, A., i, 589.

Robertson, Thorburn Brailsford, and

J. E. Greaves, the refractive indices of solutions of certain proteins. V.

Gliadin, A., i, 589.

Robin, F., and P. Gartner, the etching of steels; austenite and martensite,

A., ii, 495. Robinoff, Michael. See Carl Gustav Schwalbe.

Robinson, Charles S., two compounds isolated from peat soils, A., ii, 431.

Robinson, Charles Stanley, and Hum-phrey Owen Jones, complex thio-oxalates, P., 279.
Robinson, Henry Haliburton, the con-

stituents of the oil of Pinus longifolia, P., 247.

Robinson, J. E. See Charles James.

Robinson, Robert. See Norman Bland, Edward Hope, and William Henry Perkin, jun.

Roche, \vec{D} . A., a method of qualitative analysis, A., ii, 1031.

Rocques, Xavier, and G. Sellier, estimation of gum in syrups, A., ii, 775.

Rodin, Nils J., proteolysis in the thymus of the calf, A., ii, 1112.

Rodolico, L., comparative action of strophantin and digitoxin on the toad's heart, A., ii, 515.

Rodriguez Carracido, José, biochemical classification of the proteins, A., i, 90.

Rodriguez Mourelo, José, and Antonio García Banús, chloroacetylene, A., i, 414.

action of carbon on chromyl chloride, A., ii, 731.

Roerdanz, Walter. See Heinrich Klinger.

Roemer, Carl, pharmacology of veronal. I. Symptoms and doses, A., ii, 1120.

Roemer, Carl. See also Carl Jacobj. Rösing, Georg. See Theodor Remy.

Roethlisberger, Paul, clinical process for the estimation of uric acid in blood serum, A., ii, 548.

Roettgen, Theodor. See Karl Windisch. Rogers, Austin Flint, eglestonite from San Mateo Co., California, A., ii,

new synthesis and new occurrences of covellite, A., ii, 900.

minerals from the lead and zinc district of Galena-Joplin (Kansas-Missouri), A., ii, 900.

Rogers, Charles G., temperature-coefficient of the rate of the heart beat, A., ii, 503.

Rogerson, Harold, chemical examination of the root of Lasiosiphon meissnerianus, A., ii, 325.

Rogerson, Harold. See also Frederick Belding Power.

Rogoziński, Felix, glycogenic property of glucosamine, A., ii, 814.
Rogosiński, Felix. See also Gabriel

Bertrand.

Rohland, Paul, the causes of the variation in the velocity of hydration of cement, A., ii, 605.

the hydration and hardening of cement, A., ii, 881.

I. Cause of the de-rusting of iron in ferroconcrete. II. Two chemical processes occurring in a railway tunnel, A., ii, 1093.

Rohner, Franz. See Fritz Fichter.

Rohonyi, Hugo, enzyme action and dissociation, electrolytic 758.

Roll, C. See Georg Korschun.

Rolla, Luigi, dissociation of hydrated salts, A., ii, 375. diffusion of electrolytes in colloids, A.,

ii, 969.

See A. Daniel-Brunet. Rolland, C.

Rollett, Adolf, linolenic acid and linseed oil, A., i, 175.

Romanski, Zygmunt, estimation of phosphoric acid in superphosphates and bone-meals, A., ii, 227.

Romburgh, Pieter van, action of nitrous acid on dinitrodialkylanilines, A., i, 281.

additive compounds of m-dinitrobenzene, A., i, 622.

hypaphorine and the relation of this

substance to tryptophan, A., i,

Romburgh, Pieter van, and George Barger, preparation of the betaine of tryptophan and its identity with the alkaloid hypaphorine, T., 2068; P., 258.

Romyn, Gysbert, estimation of nitric acid, A., ii, 767.

Rona, Peter, the behaviour of chlorine in serum, A., ii, 50, 126.

Rona, Peter, hydrolysis of esters in the tissues, A., ii, 627.

the scission of esters in the blood, A., ii, 740.

Rona, Peter, and A. Döblin, blood-sugar. IX. The permeability of blood-corpuscles to dextrose, A., ii, 302. glycolysis. II., A., ii, 619.

Rona, Peter, and Leonor Michaelis, ester and fat hydrolysis in blood and serum,

A., ii, 302.

Rona, Peter, and Dengo Takahashi, blood-sugar. VIII. The sugar content of the corpuscles, A., ii, 125.

the behaviour of calcium in the serum, and the calcium content of the bloodcorpuscles, A., ii, 302.

Rona, Peter. See also Emil Abderhalden and Leonor Michaelis.

Ronnet, Léon, estimation of ferrocyanides

and thiocyanates, A., ii, 938.

Rooks, J. F. See Anton Julius Carlson. Roop, W. P., new method for investigation of the magnetic permeability of gases, A., ii, 183.

Rosanoff, Martin A., Louise Gulick, and Herbert K. Larkin, preparation of acetamide, A., i, 529.

Rosanoff, N. A. See Nicolai D. Zelinsky.

Rosario, José I. del, oxidation of hexoses by air in presence of alkali hydroxides, A., i, 605.

Rosati, Aristide, crystallographic study of ethyl isosuccino-p-toluidate, A., i, 776.

crystallographic study of potassium p-hydroxybenzoate, A., i, 864.

crystallographic observations on cerium

sulphate tetrahydrate, A., ii, 984.

Roschansky, D., influence of the spark on the frequency of electrical vibrations, A., ii, 15.
ose, Robert. See Hans Stobbe.

Rose, Robert.

Rose, Robert Evstafieff, reduction of the anhydroxime of o-benzoylbenzoic acid, A., i, 372.

Rose, Rudolf. See H. Gödecker.

Rose, William Cumming, mucic acid and intermediary carbohydrate metabolism, A., ii, 904.

creatine and creatinine. III. Excretion of creatine in infancy and childhood, A., ii, 1012.

William Cumming. See also Lafayette Benedict Mendel.

Rosebrugh, T. R., and William Lash Miller, mathematical theory of the changes of concentration at the electrode brought about by diffusion and by chemical reaction, A., ii, 181. Roseeu, A. See Heinrich Wieland.

Rosemann, Rudolf, physiology of digestion. III. The secretion of gastric juice when the chlorine supply of the body is lessened, A., ii, 998.

physiology of digestion. IV. The total chlorine of the animal body on a diet rich in chlorine, A., ii, 1110. physiology of digestion. V. The total chlorine of the human fectus,

A., ii, 1110.

Rosenberg, Anna. See W. Zaleski.

Rosenberg, J. O., the ferronitrosulphides and their relation to the nitroprussides. III., A., ii, 290.

Rosenbusch, Richard. See Arthur Kötz. Rosenhain, Walter, and Sydney L. Archbutt, constitution of the alloys aluminium and zinc, A., ii, 895.

Rosenheim, Arthur, iso- and hetero-

poly-acids. IV. The constitution of metatungstates and borotungstates, A., ii, 612.

Rosenheim, Arthur, and R. Bernhardi-Grisson, the electrolytic reduction of tungstic acid, A., ii, 402.

Rosenheim, Arthur, and Abraham Garfunkel, cobaltinitrites, A., i, 619.

Rosenheim, Arthur, and Franz Kohn, iso- and hetero-poly-acids. I. Metatungstic acid, A., ii, 116.

Rosenheim, Arthur, and Jacob Pinsker, iso- and hetero-poly-acids. III. The basicity of some hetero-poly-acids, A., i, 265.

Rosenheim, Arthur, and M. Weinheber, iso- and hetero-poly-acids. II. Oxalato-tellurates, A., i, 109. gravimetric estimation of tellurium

and alkalimetric estimation telluric acid, A., ii, 151.

Rosenheim, Otto, quadriurates, A., i,

Rosenkranz, W., Fehling's solution, A., ii, 663.

Rosenmund, Karl W., hydroxy- and dihydroxy-phenylalkylammonium compounds and \(\beta\)-nitrostyrenes, A., i, 34.

Rosenstiehl, [Daniel] Auguste, parallelism between the occurrence of cohesion and the conditions necessary for dyeing, A., ii, 99.

polymerised water and water of civstallisation, A., ii, 270.

rôle of affinity in dyeing, A., ii, 372. polymerised water and water of crystal-

lisation. Temperature and conditions of dehydration; water of crystallisation, A., ii, 386.

historical data relating to osmotic force. Rectification of authors' names, A., ii, 588.

Rosenthal, L. See Daniel Vorländer.

Rosenthal, Oskar. See Julius Morgenroth.

Rosenthaler, Leopold, hydrolysis of amygdalin by emulsin, A., i, 99. [solutions of benzaldehyde and hydrogen cyanide in water], A., i, 987. specific stereochemical behaviour of

catalysts, A., ii, 384. estimations with mercuric nitrate, A.,

ii, 668.

pyro-analyses of drugs, A., ii, 948. **Roshdestwensky**, Alexander, and William Cudmore McCullagh Lewis, the electrochemistry of solutions in acetone. Part I., T., 2138; P., 266. **Rosin**, J., volumetric estimation of

phosphoric acid, A., ii, 768.

Ross, Alexander David, and Robert Cochran Gray, the magnetism of the copper-manganese-tin alloys under varying thermal treatment, A., ii, 183. Ross, E. L. See Harry Sands Grindley.

Ross, E. L. See Harry Sands Grindley.
Ross, William H. See Raymond Calvier
Benner.

Rossel, Arnold, biology of the metal thorium, A., ii, 1117.

Rossi, Ernst, the relationship between muscular rigor and protein coagulation; chemical stimulation of muscle. II. Rigor produced by salts, A., ii, 812.

Rossi, Felice. See Pietro Albertoni. Rossi, Paolo, radioactive equilibrium in Vesuvian cotunnite, A., ii, 174.

Rossiter, Edmund Charles, the estimation of sulphides in alkali cyanide, A., ii, 654.

Rosso, G. del. See Bernardo Oddo. Rost, H. See Georges Darzens. Roth, Paul. See Ludwig Knorr.

Roth, Walter A. See Karl Auwers. Rothberg, P. See Louis J. Curtman. Rothberger, C. J., and Heinrich Winter-

Rothberger, C. J., and Heinrich Winterberg, action of barium and calcium on the heart; extra systolic ventricular tachycardia experimentally produced by stimulation of the accelerator nerves, A., ii, 1117.

the increase of cardiac activity produced by calcium, A., ii, 1117.

Rothe, O. See Ludwig Knorr.

Rothenfusser, S., detection of sucrose in wine, white beer, etc., A., ii, 665.
Rothlauf, Leo. See Alfred Einhorn.

Rothschild, Max. See Martin Freund. Rotinjanz, L. See Nicolai N. Ragornoff.

Rotta, W. See Edouard Vongerichten. Rottgardt, Karl, the cathode fall in argon (air, nitrogen, hydrogen), and the periodic system of the elements, A., ii, 178.

Roubier. See Sarvonat.

Roudsky. See A. Laveran.

Roure-Bertrand Fils, L. Labaune, and J. Dupont, [essential oils], A., i, 895.

Routala, O. See Gustav Komppa. Roy, Charles. See Paul Rabe.

Rózsa, Michael, the influence of affinity in solutions, A., ii, 1073.

Rubens, Heinrich, and Otto von Baeyer, an extremely long-waved radiation of mercury vapour, A., ii, 350.

Rubens, Heinrich, and Robert Williams Wood, the isolation of long-waved heat rays by quartz lenses, A., ii, 92.

Rudge, William Arthur Douglas, observation on the surface-tension of liquid sulphur. A ii 258

liquid sulphur, A., ii, 258.

Rücker, Conrad. See Hans Stobbe. Ruer, Rudolf, and Nikolaus Iljin, the

stable system iron—carbon, A., ii, 494. Rütgerswerke-Aktiengesellschaft and Curt Geutsch, preparation of m-tolyl ortho-oxalate, A., i, 438.

Ruff, Otto, permeability to light of mixtures of several light-absorbing substances [spectroscopic evidence for the formation of new compounds], A., ii, 237.

a new method for the analysis of some binary compounds, based on the law of mass action, A., ii, 264.

the so-called sulphammonium and the spectroscopic test for new compounds, A., ii, 484.

the equilibrium diagram of the ironcarbon alloys, A., ii, 897.

Ruff, Otto, and Hans Georges, lithium imide, A., ii, 280.

Ruff, Otto, and Ewald Gersten, some sources of error in the gasometric estimation of nitrates and nitrites by Schloesing's or Piccini's methods, A., ii, 930.

Ruff, Otto, and Otto Goecke, the solubility of carbon in iron, A., ii, 897.

Ruff, Otto, and Leopold Hecht, sulphammonium and its relation to nitrogen sulphide, A., ii, 277.

Ruff, Otto, and Alfred Heinzelmann, uranium hexafluoride, A., ii, 988.

Ruff, Otto, and Herbert Lickfett, vanadium chlorides, A., ii, 291. vanadium bromides, A., ii, 988.

vanadium fluorides, A., ii, 989.

Ruhemann, Siegfried, triketohydrindene hydrate. Part III. Its relation to alloxan, T., 792; P., 97. triketohydrindene hydrate. Part IV.

triketohydrindene hydrate. Part IV. hydrindantin and its analogues, T., 1306; P., 163.

triketohydrindene hydrate. Part V. the analogues of uramil and purpuric acid, T., 1486; P., 210.

Ruhemann, Siegfried, and William Johnson Smith Naunton, diphenyl-Williamcyclopentenone, P., 309.

Rule, Alexander, the action of hydrogen sulphide on the alkyloxides of the metals. Part I. Sodium and potassium ethoxides, T., 558; P., 60.

Rullmann, W., Schardinger's milk reaction, A., ii, 667.

Rulon, S. A., and Philip Bouvier Hawk,

studies on water-drinking. Uric acid elimination following copious water drinking between meals, A., ii, 135.

studies on water-drinking. IV. The excretion of chlorides when large amounts of water are taken between

meals, A., ii, 1012.

Runge, Carl, the radioactivity the air over the open sea, A., ii, 1050.

Runne, Ernst. See Hermann Emde. See Julius Tröger. Runne, H.

Rupe, Hans, and Hans Altenburg, semicarbazide and cyclic nitrosochlorides, A., i, 72.

Rupe, Hans, and James Bürgin, turmeric IV. Synthesis of α-p-tolyl-αoil.

methylbutyric acid, A., i, 446.
Rupe, Hans, and W. Kerkovius, tetramethylcycloheptatriene, A., i, 847.

Rupe, Hans, and Alfred Steinbach, II. Oxidation proturmeric oil. ducts of curcumone, A., i, 69. turmeric oil.

rmeric oil. III. Synthesis γ-p-tolylvaleric acid, Λ., i, 293.

Rupert, Frank F. See Gilbert Newton Lewis.

Rupp, Erwin, phenolphthalein derivatives and their behaviour as indicators,

Rupp, Erwin, and Kroll, estimation of

hypophosphites, A., ii, 1133. Rupp, Erwin, and Franz Lehmann, estimation of nitrites, A., ii, 535. qualitative analytical treatment of silicates with boric acid, A., ii, 658.

Ruppenthal, Richard. See Max Busch. Ruppin, Ernst, ratio of the Cl-, SO3-, and σ_0 -values of a series of sea-water samples examined in the hydrographical laboratories of Helsingfors, Kiel, Christiania, Monaco, and Nancy, A., ii, 123.

Russ, Sidney. See Helen Chambers and Walter Makower.

Russell, Alexander Smith, and Frederick Soddy, the γ -rays of thorium and

actinium, A., ii, 88. Russell, Alexander Smith. See also Willy Marckwald.

Russenberger, J. H., extension of the laws of capillarity to cases where the elements of the capillary system are mobile with respect to one another; extension leading to a new view of the phenomena of swelling of dried wood, of the dissolution of gums, albumins, etc., and of true solutions, A., ii, 794.

Russo, C., velocity of anodic solution of nickel in normal sulphuric acid,

A., ii, 181.

comparison between the velocity of solution and the anodic polarisation of nickel in normal sulphuric acid, A., ii, 181.

anodic behaviour of nickel in presence of chromous salts, A., ii, 1056.

Ruston, Arthur G. See Charles Crowther. Rusznyâk, Stephen, the individual differences of the red blood-corpuscles on

hæmolysis, A., ii, 1108.

Rutherford, *Ernest*, the scattering of α and β-particles by matter and the structure of the atom, A., ii, 453.

Rutherford, Ernest, and Hans Geiger, transformation and nomenclature of the radioactive emanations, A., ii, 955.

See also Bertram Rutherford, Ernest. Borden Boltwood.

Ruthing, Alexander. See WilhelmWislicenus.

Ružička, Leopold. See HermannStaudinger.

Rybár, Stephan, resolution of the spectral lines of lanthanum and cobalt in the magnetic field, A., ii, 1042. Ryn, Willem van, Kjeldahl nitrogen

process, A., ii, 226

Rywosch, S., increased rate of diffusion of dextrose, A., ii, 818.

Sabatier, Paul, reduction and oxidation by catalysis, A., i, 702.

method for making two substances react in the electric arc, A., ii, 91.

Sabatier, Paul, and Alphonse Mailhe, direct esterification by catalysis; preparation of benzoic esters, A., i, 258. direct esterification and hydrolysis by catalysis, A., i, 258.

catalytic scission of esters by certain metallic oxides, A., i, 348.

catalytic esterification of alcohols by fatty acids: case of formic acid, A., i, 416.

catalytic decomposition of formic acid, A., i, 515.

new method of preparation of benzylamine and hexahydrobenzylamine, A., i, 627.

Sabatini, G. See Italo Bellucci.

Sabot, R. See Louis Duparc.

Sacerdoti, R., electrode potentials in the electrolytic manufacture of chlorine and alkali, A., ii, 789.

Sachanoff, Al. N., electrical conductivity of solutions in esters with small dielectric constants, A., ii, 247.

electrical conductivities of solutions in acetic and propionic acids, A., ii, 689. abnormal conductivity changes, A., ii, 691.

Sacher, Julius Friedrich, Falk's white lead, A., ii, 40.

the colouring matter of red radishes, A., ii, 148.

the simplest arrangement for reading burettes, A., ii, 650.

the volumetric estimation of lead peroxide, A., ii, 770.

Sachs, Franz, and Percy Brigl, ring formation in the peri-position of the naphtualene series. IV. Attempts to prepare a six-membered carbon ring, A., i, 719.

Sachs, Franz, and R. B. Forster, ring formation in the peri-position in the naphthalene series. III. Derivatives of 2':4'-dinitrophenyl-1:8-naphthylenediamine, A., i, 753.
Sachs, Franz, and Gerhardt Mosebach, acenaphthene. II., A., i, 960.

Sachs, Paula. See Ludwig Vanino.

Sachs, Stanislaus, observations on the ions and fog-nuclei which are produced in gases by ultra-violet light, A., ii, 246.

Sackur, Otto, the thermal formation of marganates. IV., A., ii, 400.

Sackur, Otto. See also Fritz Bahr.

Sadikoff, Wl. S., the influence of strychnine on bacteria, A., ii, 1018.

Sadler, Charles A., transformation of the energy of homogeneous Röntgen radiation into energy of corpuscular radiation, A., ii, 839.

Haridas, and Kumud Choudhuri, the action of ammonia on mercurous nitrare, A., ii, 804.

Sahlbom, (Miss) Naima, capillary analysis of colloidal solutions, A., ii, 100.

Sahlbom, (Miss) Naima. See also Fritz Fichter.

Saillard, Émile, manurial experiments

with sugar-beet, A., ii, 145.

Saito, K., production of lactic acid by

moulds, A., ii, 321.
Saito, K. See also Paul Lindner.
Saladin, O. See Reginald Oliver Herzog. Salant, William, and J. B. Rieger, influence of alcohol on protein metabolism in dogs, A., ii, 411.

Salibill, Jr., the action of light on the bromination of tertiary o- and pbutyltoluene and the chlorination of tert.-butylbenzene and o-butyltoluene, A., i, 276.

Salkowski, Ernst [Leopold], the optical behaviour of lactic acid in a meat preparation, A., i, 6.

phytosterol and cholesterol, A., i, 45.

yeast-gum, A., i, 825.

a characteristic behaviour of alkali phosphate, A., ii, 39.

the behaviour of yeast gum in autolysis and in alcoholic fermentation, A., ii, 62.

an improvement in Scherer's reaction for inositol, A., ii, 73.

easy detection of arsenic; rapid separation of arsenic and some other metals from liquids, A., ii, 153.

I. Presence of dextrose and notes. creatinine in hen's egg. II. Contents of a dermoid cyst. III. Some properties of hæmatin. IV. Estimation of pertone in the presence of albumoses. V. The quantitative estimation of sulphur in urine and the significance of neutral sulphur, A., ii, 626.

detection of mercury in urine, A., ii, 771, 934.

Salmon, E. A., method for making two substances react in the electric are, A., ii, 15.

Salway, Arthur Henry, the orientation of the nitro-group in nitromyristicinic acid, T., 266; P., 20.

synthesis of 4:6-dimethoxy-2-\beta-methylaminoethylbenzaldehyde, T., 1320; P., 191.

chemical examination of Calabar beans, T., 2148; P., 273.

Salway, Arthur Henry. See also Frederick Belding Power.

Salzberg, D. See David Maron.

Samsonow, Alexander, a new uranium colloid, A., ii, 207.

Sanchez, Jean A, quantitative separation of iron and manganese, A., ii, 1138.

Sanchez, Juan A., halogenimetry, A., ii,

Sand, Henry Julius Salomon, and Douglas John Law, employment of the electrometric method for the estimation of the acidity of tan liquors. I., A., ii, 233.

Sand, Henry Julius Salomon, and William Miles Smalley, new apparatus for the electro-analytical estimation of metals; a glass-frame anode for use with silver and nickel cathodes, A., ii, 434.

Sand, Henry Julius Salomon. See also Robert Martin Caven and JosephTurney Wood.

Sanders, James McConnell, Candelilla wax, P., 250.

a convenient method for determining the density of heavy petroleums, P., 250.

the determination of sulphur in petroleum, P., 329.

Sanderson, James Cox, the probable influence of the soil on local atmospheric radioactivity, A., ii, 846. Sandgren, J. See H. Lyttkens.

Sandonnini, Carlo, double salts of lead fluoride and the other halides of the same metal, A., ii, 284, 491.

thermal analysis of mixtures of cuprous chloride with chlorides of univalent elements, A., ii, 606.

thermal analysis of binary mixtures of the chlorides of univalent metals, A., ii, 800.

Sandonnini, Carlo, and G. Scarpa, thermal analysis of binary mixtures of the chlorides of bivalent metals, A., ii,

Sandqvist, $H\ddot{a}kon$, phenauthrene-2-sulphonic acid and some of its derivatives, A., i, 190.

Saneyoshi, Sumio, B-butanolglycuronic

acid, A., i, 836. Saneyoshi, Sumio. See also Carl Neuberg. Sanford, Fernando, the significance of the periodic law, A., ii, 874.

Sanna, G. See Luigi Francesconi.
Santi, L., phototropy of the hydrazones

of furfuraldehyde, A., i, 1030. Santi, L. See also Maurice Padoa.

Saposhnikoff, W. A., secondary β -rays,

A., ii, 840. Saposhnikoff, W. G., substantive dye-

ing, A., ii, 1070. Sapper, A. See Otto Fischer.

Sarasin, Edouard, and Th. Tommasina. action of slight rise of temperature on the induced radioactivity, A., ii, 244.

Sargarian, Johann. See Wilhelm Steinkopf.

Sarti, C. See C. Gazzetti.

Sartory, A., Meyer's reagent for the detection of blood, A., ii, 947.

Sarvonat and Roubier, experimental poisoning by oxalic acid; localisation of the poison in the various organs, A., ii, 815.

Sasaki, Takaoki, a sensitive reaction for scatole, A., ii, 80.

Sassu, Matei. See Herman Decker. Satta, G. See Riccardo Luzzato.

Satterly, John, the radium-content of salts of potassium, A., ii, 243.

Savory, Horace. See Frederick Gowland Hopkins.

Saytzeff, Michael, action of zinc on a mixture of the haloid ester and anhydride of saturated monobasic acids. A., i, 419.

action of zinc on a mixture of 1-methylcyclohexan-3-one and allyl iodide, A., i, 444.

action of zinc on a mixture of menthone and allyl iodide, A., i, 474.

Saytzeff, Michael, and Unanoff, synthesis of methylethylnonylcarbinol, A., i, 415.

Sazanoff, P. See Volkmar Kohlschütter. Sbarsky, B. See Alexis Bach.

Scaffidi, Vittorio, purine metabolism. V. The behaviour of the purine bases in muscle during work, A., ii, 216.

VI. purine metabolism. Purine metabolism under the influence of diminished oxidative processes of the organism, A., ii, 507.

purine metabolism. VII. Purine metabolism during starvation, A., ii,

purine metabolism. VIII. The content in purine bases of various kinds of muscular tissue, A., ii,

Scagliarini, G. See Roberto Ciusa. Scal, C. See Georges Urbain.

Scala, Alberto. See Margherita Traube-Mengarini.

Scandola, Everardo, hydroxynitrosyl-sulphuric acid, A., ii, 273.

the action of metallic sodium on hydrazine hydrate, A., ii, 279. colorimetric estimation of strychnine,

A., ii, 553.

Scandola, Everardo. See also Domenico Ganassini.

Scarafla, P. See Luigi Francesconi. Scarpa, G. See Carlo Sandonnini.

Scarpa, Oscarre, analysis of the radioactivity of some thermal waters of the island of Ischia, A., ii, 8.

measurement of the viscosity of liquids and of lubricants, A., ii, 17.

experiments on diffusion [of dissolved substances]. II. and III., A., ii, 472.

Scelsi, G. See Francesco Carlo Palazzo. Schäfer, P., hæmolytic extracts of organs, A., ii, 996.

Schaffer, Friedrich, and E. Philippe, the detection of sucrose in wine by Rothenfusser's process, A., ii, 665.

Schagger, A. See Jan von Zawidzki. Schaidhauf, A. See Wilhelm Muthmann. Schairer, Otto. See Julius Schmidt.

Schalk, Willem van der. See Fritz Ullmann.

Schall, Carl, measurements of photochemical action in ultra-violet light by means of sensitive films, A., ii, 835.

Schaller, Waldemar Theodore, natramblygonite, a new mineral, A., ii, 121. composition of jamesonite and warrenite, A., ii, 209.

bismuth ochres from San Diego Co., California, A., ii, 293.

ferritungstite, a new mineral, A., ii, 903.

composition of nephelite, A., ii, 992. the alunite-beudantite group, A., ii,

composition of French phosphorite minerals, A., ii, 1102.

crystallised variscite from Utah, A., ii, 1103.

Schaller, Waldemar Theodore. See also B. S. Butler and Esper S. Larsen, jun. Schardinger, Franz, formation of crystalline polysaccharides (dextrins) from starch paste by microbes, A., i,

Scharwin, Wassili W., N. I. Bjenkoff, S. A. Dmitrieff, A. L. Gandurin, K. Kusnezoff, and W. A. Naumoff, condensation of anthraquinone with

phenols, A., i, 655. Scheffer, F. E. C., the determination of three-phase pressures in the system: hydrogen sulphide and water, A., ii, 264.

heterogeneous equilibrium in dissociating compounds, A., ii, 379.

the system hydrogen sulphide-water, A., ii, 870.

Scheiber, Johannes, homologous nature of anthranil and methylanthranil, A., i, 915.

Scheiber, Johannes, H. Fleischmann, and K. Kloppe, N-alkylated aldoximes, A., i, 382.

Scheiber, Johannes, and P. Lungwitz, action of the chlorides of dibasic fatty acids on ethyl sodioacetoacetate, A., i, 836.

Scheiber, Johannes, Hans Reckleben, and K. Strauss, constitution of copper acetylide. II., A., i, 188.

Scheiber, Johannes. See also Hans Reckleben.

Scheibler, Helmuth, and Alvin Sawyer Wheeler, the Walden inversion. VII. Optically active leucic (a-hydroxyisohexoic) acid and its transformation into a-bromoisohexoic acid, A., i, 835.

Scheibler, Helmuth. See also Emil Fischer.

Schell, Curt, photographic-photometric absorption measurements of silver iodide in the ultra-violet spectrum, A., ii, 831.

Schellbach, Hans. See Hermann Emde. Schelle, Robert, preparation of pure tellurium, A., ii, 388.

Schemtshuschny, S. F. See Nicolai N. Nagornoff.

Schenck, Martin, cholic acid. II., A., i, 10.

methylated guanidines, A., i, 842. Schenk, Daniel. See Edgar Wedekind. Schepss, Wilhelm. See Julius Tafel.

Scheringa, Klaas, detection and estimation of potassium perchlorate in potassium chlorate, A., ii, 153.

adsorption experiments, A., ii, 191. position of the most important elements

in the periodic system, A., ii, 594. tests for purity, and the washing of precipitates in relation to adsorption, A., ii, 765.

Scheuble, Rudolf, preparation of normal oxalic acid esters of lower aliphatic

alc hols, A., i, 419.
Schidrowitz, Philip, and Harold A. Goldsbrough, detection and estimation of small quantities of antimony, A., ii, 338.

Schiff, Robert. See G. Bianchi.

Schiffer, Paul. See Wilhelm Strecker. Schildbach, R., electrochemical behaviour of cobalt, A., ii, 13.

Schilling, Benomar. See Emil Abderhalden.

Schimmel & Co., essential oils, A., i, 475,

Schindelmeiser, I. See Iwan L. Kondakoff.

Schirm, Erik, precipitation of aluminium, chromium, and iron by ammonium nitrite, A., ii, 936.

precipitation of iron with hydrazine

hydrate, A., ii, 937. ecipitation of zinc, manganese, precipitation cobalt, nickel, copper, and cadmium from their ammoniacal solution with sodium carbonate and phenyltrimethylammonium carbonate, A., ii, 1138.

Schirm, Erik. See also Arthur Stähler. Schirmeister, H. See Karl Bornemann. Schirokauer, H., and G. G. Wilenko, the estimation of diastase in organs, A., ii, 675.

Schittenhelm, Alfred. See Franz Frank and Efim Semen London.

Schleicher, G., rapid formation of lead accumulators with solutions of sulphuric acid and chlorate or perchlorate, A., ii, 848.

Schlenk, Wilhelm, and (Miss) Anna Herzenstein, triarylmethyls. V., A., i. 122.

Schlenk, Wilhelm, Leopold Mair, and C. Bornhardt, triphenylmethyl and triphenylcarbinol, A., i, 434.

Schlenk, Wilhelm, Julius Renning, and Georg Racky, hexaphenylsilicoethane and some diphenyl substitution products of ordinary ethane and ethylene, A., i, 596.

Schlenk, Wilhelm, and Tobias Weickel, metallic compounds of diaryl ketones, A., i, 545.

Schlesinger, M. D. See Henry Clapp Sherman.

Schlesinger, N., aa'-ethylenedi-iminodiisobutyric acid, A., i, 427.

Schliemann, Wilhelm, cellobiose and the acetolysis of cellulose, A., i, 179. Schliephacke, Gerhard, mutarotation of

maltose, A., i, 16.

Schlæsing, Théophile, the mother liquors of salt gardens (marais salants), A., ii, 392.

Schloss, Rudolph. See Carl Willgerodt. See Richard B. Schlundt, Herman. Moore and R. C. Palmer.

Schmeja, Siegmund. See Gustav Heller. Schmid, Alfred. See Fritz Ullmann.

Schmid, H. See Robert Burri. Schmid, Hans, position of the substitu-

ents in hydroxyhomosalicylic [dihydroxytoluic] acid, A., i, 780.

Schmidlin, Julius, explanation of the reaction between p-benzoquinone and hydrogen chloride, A., i, 727. Schmidt, Carl L. A., Benedict's method

of estimating the total sulphur in urine, A., ii, 67.

Schmidt, Curt, periodic system [of the

elements], A., ii, 198.

Schmidt, E. W., influence of pressure on the electrolytic conductivity of solutions in different solvents, A., ii,

Schmidt, Ernst [Albert], creatine, A., i, 20.

ephedrine and ψ -ephodrine, A., i,

alkaloids of datura metel seed, A., ii,

Schmidt, Ernst, and Franz Wilhelm Calliess, ephedrine and ψ -ephedrine, A., i, 742.

Schmidt, Ernst, and D. Bruns, brucine polyhydrosulphides, A., i, 913.

Schmidt, Gerhard Carl, electric conductivity of salt vapours, A., ii,

adsorption of solutions. II., A., ii, 969.

Schmidt, H., oil of phosphorus and its combinations in the organism investigated by means of the electroscopic detection of phosphorus, A., ii, 815.

Schmidt, Hans. See Paul Cermak.

Schmidt, Hubert. See Emil Abderhalden.

Schmidt, Julius, and Eugen Heinle, phenanthrene series. XXXI. Nitroand amino-phenanthenes, A., i, 626.

Schmidt, Julius, and Otto Schairer, phenanthrene series. XXX. Preparation of 4-hydroxy- from 4-nitrophenanthraquinone, A., i, 386.

Schmidt, Julius, Otto Schairer, and Ernst Glatz, phenanthrene series. Phenantriazines, A., i, 239.

Schmidt, R. See Walther Borsche.

Schmincke, Alexander, and Ferdinand Flury, the behaviour of the red bloodcorpuscles in chronic oleic acid poisoning, A., ii, 125.

Schmitz, Ernst. See Paul Ehrlich and Gustav Embden.

See Otto Dimroth. Schneider, Heinrich. Schnerr, Al. See Tadeusz Estreicher.

Schnurmann, K. See Paul Pfeiffer. Schoch, Eugene Paul, and O. P. Ran-dolph, behaviour of iron and nickel anodes in various electrolytes, A., ii,

Schölberg, Harold Alfred, and Robert Lauder Mackenzie Wallis, chemical changes produced in milk by bacteria and their relation to the epidemic diarrhœa of infants, A., ii, 512.

Schölberg, Harold Alfred. See Robert Lauder Mackenzie Wallace. See also

Schöller, Max Reinhold. See Hermann Staudinger.

Schoeller, Walter, Walther Schrauth, and Paul Goldacker, synthesis of mercuriated a-anilino-fatty acids, A., i, 699.

Schoeller, Walter. See also Franz Müller and Walther Schrauth.

Schoen, Marcel. See Auguste Fernbach. Schöndorff, Bernhardt, and Friedrich Grebe, the origin of glycogen from formaldehyde, A., ii, 306.

Schöndorff, Bernhard, and Fritz Suckrow, the influence of phloridzin on glycogen formation in the liver, A., ii,

306.

Schöttle, Iwan, velocities of reaction of acetone and lutidone with phenylhydrazine and hydroxylamine under various conditions, A., ii, 1079.

Schöttle, Joh. See Pavel Iw. Petrenko-Kritschenko.

Scholes, Samuel Ray. See Harry Ward Foote.

Scholl, A. See W. Greifenhagen. Scholl, Max Eugen.See Richard

Anschütz.

Scholl, Roland, an experiment to demonstrate the reducing properties of cellulose, A., i, 525.

colloidal chemical observations on the pyranthrone vat dyes, A., i, 656.

Scholl, Roland, and Siegfried Edlbacher, degradation of indanthren to dihydroxypyrazinoanthraquinone andbehaviour with beizoyl chloride and sodium ethoxide, A., i, 755.
Scholl, Roland, and Werner Neovius,

introduction of several phthalic acid groups into aromatic compounds. IV. Experiments with carbazole, A., i,

567.

Scholl, Roland, Werner Neovius, and Karl Holdermann, introduction of several phthaloyl groups into aromatic hydrocarbons. I. Experiments with diphenyl, A., i, 452.

Scholl, Roland, Julius Potschiwauscheg, Josef Lenko, and E. Böcker, synthesischer

thetical experiments in the pyranthr-

one series, A., i, 1007.

Scholl, Roland, and Emil Schwinger, conversion of 1:2-benzanthraquinone (naphthanthraquinone) into anthraquinone-1:2-dicarboxylic acid, A., i, 995.

Scholl, Roland, and Christian Seer, introduction of several phthaloyl groups into aromatic compounds. II. Derivatives of diphenyl, A., i,

identity of Graebe's isochrysofluorene with dihydrobenzanthrene, A., i, 626.

Scholl, Roland, Christian Seer, and Walter Tritsch, introduction of several phthalic acid groups into aromatic III. Experiments with compounds. thianthren, dimethy thianthren, theodiphenylamine, \mathbf{and} N-methylthio-

diphenylamine, A., i, 557.
Scholl, Roland, and G. von Wolodkowitsch, existence of quinonoid properties in anthraquinone derivatives,

A., i, 888.

Scholl, Roland. See also Oscar Bally. Scholtz, Max [Erwin], assymmetry of the quinquevalent system Na2bcd, A., i, 326.

alkaloids of pareira root, A., i, 913.

Scholze, E. See Alfred Werner. Schoorl, Nicholaas, microchemical reaction for aluminium with cæsium

chloride, A., ii, 443. Schoorl, Nicholaas. See also Wilhelm

Lenz.

Schossberger, E. See Friedrich Wilhelm Semmler.

Schott, Eduard, the behaviour of gluconic and saccharic acids in the organism, A., ii, 514.

Schoulz. See Robert Kremann.

Schrauth, Walther,and Schoeller, the disinfecting power of complex organo-mercury compounds. I. Aromatic mercurycarboxylic acids, A., ii, 63.

biochemical investigations with aromatic mercury compounds, A., ii,

637.

Schrauth, Walther, Walter Schoeller, and Richard Struensee, complex mercury compounds of cinnamic

acid and its esters, A., i, 595. ether derivatives of β -phenylhydracrylic acid (B-hydroxy-B-phenylpropionic acid), A., i, 641.

Schrauth, Walther. See also Franz Müller and Walter Schoeller.

Schreiber, F., catalytic preparation of ammonia from compounds containing nitrogen and carbon, A., ii, 881.

Schreinemakers, Frans Antoon Hubert, equilibrium in the system: water, sodium sulphate, sodium chloride, copper sulphate, cupric chloride, A., ii, 592.

Schreinemakers, Frans Antoon Hubert, and (Miss) Woutrine Constance de Baat, equilibria in the system: sodium chloride, sodium sulphate, cupric chloride, cupric sulphate, and water at 25°, A., ii, 381.

Schreinemakers, Frans Antoon Hubert, and Th. Figee, the system : watercalcium chloride—calcium hydroxide

at 25°, A., ii, 983.

Schreiner, Oswald, symptoms shown by plants under the influence of different toxic compounds, A., ii, 427.

ElbertSchreiner, Oswald,and Lathrop, dihydroxystearic acid good and poor soils, A., ii, 923.

Schreiner, Oswald, and Edmund Shorey, the presence of arginine and histidine in soils; pyrimidine derivatives and purine bases in soils, A., ii, 65.

chemical nature of soil organic matter, A., ii, 147.

some acid constituents of soil humus, A., ii, 147.

cholesterols in soils: phytosterol, A., ii, 327.

Oswald, Michael Xavier Schreiner, Sullivan, and F. R. Reid, studies in soil oxidation, A., ii, 146.

Schröder, Johannes, estimation of nicotine in concentrated tobacco juice,
A. ii. 163, 552.

A., ii, 163, 552. quantity of carbon dioxide in the atmosphere at Monte Video, A., ii, 1086.

Schröder, Karl, the purification and analytical control of potassium ferrocyanide, A., ii, 1143.

Schröter, Fritz, estimation of hexamethylenetetramine (urotropine) in urine, A., ii, 343.

Schroeter, Georg, rearrangements. III. A., i, 505.

Schryver, Samuel Barnett, the state of aggregation of matter. I.—III., A., i, 245, ii, 199.

Schubert, Friedrich, estimation of starch, A., ii, 75.

Schubert, H. See Ludwig Knorr.

Schübel, Konrad. See Hermann Pauly. Schück, Bernhard. See Nikodem Caro. Schülke and Mayr, preparation of phenyl

ortho-oxalates, A., i, 125. Schüller, Jos., phloridzin- and phloretin-

acids. I., A., ii, 814.

Schürmann, E., a new method of analysing white metal, A., ii, 158.

Schütze, H. See Danckwart Ackermann. Schukoffsky, G. J., lithium amalgams, A., ii, 882.

Schulten, August de, crystallographic examination of some silicides, carbides, and borides obtained by Moissan and his pupils, A., ii, 486.

crystallographic examinations of fluorides obtained by Moissan and pupils, A., ii, 605.

crystallographic constants of some artificial apatites, A., ii, 615.

Schultze, Walter H., new method for detecting reducing and oxidising properties of bacteria, A., ii, 61.

Schulz, Karl, mean specific heat of crystallised and fused silicates at 20-100°, A., ii, 1059.

Schulze, Bernhard, manurial action of ammonium sulphate in conjunction with sodium chloride, A., ii, 65.

Schulze, Ernst [August], protein formation in ripening seeds, A., ii. 322.

Schulze, Ernst, and Urs Pfenninger, carbohydrates occurring in seeds, A., i, 17.

betaines of plants. I., A., ii, 426.

Schulze, Ernst, and Georg Trier, vegetable betaines and stachydrine, A., i, 79.

identity of vernine and guanosine and notes on vicine and convicine, A., i, 155.

Schulze, Günther, the influence of electrolytes on the maximum voltage of electrolytic valve action, A., ii, 365.

maximum tension of electrolytic valve action in fused salts, A., ii, 790.

Schulze, Paul. See Eduard Buchner. Schuravleff, B., apparatus for extraction at high temperatures, A., ii, 1082. Schuster, A. See Karl Elbs.

Schuster, Siegfried. See Richard Meyer. Schuyten, M. C., the phenomenon of agglomeration in finely powdered substances, A., ii, 98.

Schwabe, *Emil*, sedimentation tube for microscopic analysis, A., ii, 651.

Schwadron, A. See Josef Herzig. Schwalbe, Carl Gustav, mercerised cellul-

ose, A., i, 114. hydrocellulose, A., i, 115. acetylation of cotton cellulose, A., i,

712. cellulose; hydrocellulose, A., i, 712.

Schwalbe, Carl Gustav, and Michael Robinoff, action of water and of alkali on cotton wool cellulose, A., i, 180. Schwalbe, Carl Gustav, and Salomon

Schwalbe, Carl Gustav, and Salomon Wolff, studies in the carbazole series, T., 103.

Schwartz, Alfred, the effect of ions transported by the current on the primary affinity for colours, and the conductivity of polarised nerves; influence of the cations Ca, Na, K, on the anodic region, A., ii, 306.

Schwartz, Frederick W. See John Livingston Rutgers Morgan.

Schwarz, A. See C. Kelber.

Schwarz, Carl, and Frieda Lemberger, the action of minimal amounts of acid on the blood-vessels, A., ii, 809.

Schwarz, Carl. See also Otto von Fürth. Schwarz, L. See K. Lendrich.

Schwarz, Oswald, the degradation of nitrogenous substances by yeast, A., ii, 640.

Schwarzkopf, V. See Paul Pfeiffer. Schweizer, A. See Jacob Böeseken. Schwerdt, W. See Adolf Beythien.

Schwerat, W. See Adoly Beytmen.
Schwers, Frederik, the density of liquid sucrose and of its solutions in water,

T., 1478; P, 208. solutions. III. and IV., A., ii, 92. the density and refraction of the system furfuraldehyde + water, A., ii,

Schwinger, Emil. See Roland Scholl.
Sclavi, Mario, action of cyanoacetic ester on o- and p-hydroxybenzaldehydes in the presence of ammonia, A., i, 398.

Scott, J. H. See David Spence. Scott, W. M., effects of ultra-violet rays on serum, A., ii, 997.

Scott-Wilson, H., estimation of acetone in animal liquids, A., ii, 766.

Sebelien, John. See Karl Krog.

Sebor, Jan, Ostwald's dilution law, A., ii, 191.

Seeliger, R., ionisation of gases by canal rays, A., ii, 958.

Seer, Christian, preparation of alkylanthraquinones from alkylbenzoyl chlorides and aluminium chloride. I., A., i, 386.

Christian. Roland Seer, See also Scholl.

Segaller, David, the relative activities of certain organic iodo-compounds; preliminary note, P., 283.

Segerfelt, Bror. See Peter Klason.

Segrè, E. See G. Bressanin.

Seibold, Ernst. See Richard Reinhardt. Seidelin, Harald, estimation of indole, A., ii, 553.

Seidell, Atherton, convenient attachments for a melting-point apparatus, A., ii, 254.

estimation of iodine in thyroid, A., ii,

Seiter, Francis J., the permanganate

test for cocaine, A., ii, 671.
Seiter, Francis J., and Frederic Enger, identification of cocaine and some

cocaine substitutes, A., ii, 670. Sejourné, J. See Georges Darzens. Sekreteff, A. See G. Povarnin.

Selig, Arthur, chemical investigation of atheromatous aortæ, A., ii, 219.

Sell, William James, the chlorine derivatives of pyridine. Part XI. Some interactions of 3:4:5-trichloropicolinic acid and of its derivatives, T., 1679; P., 220.

Sellier, G. See Xavier Rocques.

Sellier, J., proteolytic enzymes of invertebrates, A., ii, 1113.

Sementsoff, A., and P. Konjukoff-Dobrynia, action of a mixture of allyl bromide and furfuraldehyde on magnesium: synthesis of furylallylcarbinol, A., i, 1007.

Semensoff, A. See also J. N. Reformatsky. Semmler, Friedrich Wilhelm, and Erwin W. Meyer, constituents of ethereal oils; regeneration of caryophyllene, A., i, 73.

constituents of ethereal oils. I. Identity of the aliphatic terpene from oil of hops with myrcene. Methyl esters of dicarboxylic acids. III. Preparation of isobornyl formate, A., i, 733.

Semmler, Friedrich Wilhelm, and E. Schossberger, constituents of ethereal oil; enolisation of citral; preparation of isogeraniol, C₁₀H₁₈O, A., i, 475.

components of essential oils; composition of the essential oils of Xanthoxylum aubertia (Evodia aubertia) and Xanthoxylum alatum, A., i, 1002.

Semmler, Friedrich Wilhelm, and B. Zaar, constituents of ethereal oils; perillaldehyde. constitution of C₁₀H₁₄O, A., i, 218.

constituents of essential oils; identity of the alcohol, C10H16O, of gingergrass oil with perilla alcohol; tri-

cyclenecarboxylic acid, A., i, 313. components of essential oils; "false camphorwood oil" (faux camphrier); natural occurrence of myrtenal and d-perilla aldehyde, A., i, 388.

Semper, Leopold, constitution of auramıne, A., i, 577.

Sen, Hemandra Kumar. See Biman Behary Dey and Prafulla Chandra

Senderens, Jean Baptiste, ketones derived from o-, m-, and p-toluic acids, A., i, 134.

ketones derived from phenylpropionic acid, A., i, 302.

Senderens, Jean Baptiste, and J. Aboulenc, catalytic preparation in the wet way of esters of saturated aliphatic acids, A., i, 600.

catalytic esterification of aromatic acids in the wet way, A., i, 637.

catalytic esterification of dibasic acids in the wet way, A., ii, 1080.

Sénéchal, A. See H. Colin.

``LichenEmanuel, so-called Senft,

quercinus viridis," A., ii, 527.
Senier, Alfred, and (Miss) Rosalind Clarke, studies in phototropy and Part II. Naphthylidthermotropy. eneamines, T., 2081; P., 260.

Senter, George, reactivity of the halogens in organic compounds. Part V. Interaction of esters of the bromosubstituted fatty acids with silver nitrate in alcoholic solution, T.,

enzymatic decomposition of hydrogen peroxide, A., ii, 995.

Senter, George, and Alfred William Porter, reactivity of the halogens in organic compounds. Part VI. The mechanism of negative catalysis, T.,

1049; P., 119. Serbin, E. See Leo A. Tschugaeff. Sergiewskaja, S. See Paul Pfeiffer. Serkowski, S., and Mozdzenski, so-called

oxaluria, A., ii, 311.
Sernagiotti, E. See Luigi Francesconi.
Serono, Cesare, and Antoinetto Palozzi, the lipoids of egg-yolk, A., ii, 1005.

Serra, Aurelio, remarkable garnet from Fluminimaggiore (Sardinia), A., ii, 123.

mineralogy of the mine of Calabona (Alghero), A., ii, 294.

Sesé, M., reaction of pyrophosphates with luteocobaltic chloride, A., ii, 537.

Sessa, Luigi. See Bernardo Oddo.

Seuffert, Rudolf. See Alfred Einhorn. Sewerin, S. A., mobilisation of the phosphoric acid of soils under the influence of bacteria, A., ii, 61.

Sexton, Blair. See James B. Garner. Seydel, Karl. See Heinrich Biltz.

Seydel, Siegfried, and L. Wichers, the accuracy of nitrate estimations, A., ii,

Seydel, Siegfried. See also Hans Stobbe. Seyewetz, Alphonse, and L. Poizat, direct preparation of metallic and organic sulphonates from crude sulphonation products, A., i, 360.

Seyewetz, Alphonse. See also Auguste Lumiêre.

Seymour-Jones, R. A. See HenryRichardson Procter.

See Leo Pissar-Shapovalenko, A. jewsky.

Shaw, William Bayliss, salts of 3:5-dinitroquinol, T., 1609; P., 98.

salts of the dinitrodihydroxybenzenes, P., 14.

Shaw-Mackenzie, John Alexander, pancreatic lipase. IV. The action of serum of mice inoculated with malignant mouse tumour, A., ii, 418.

Shdanovitsch, M. L., action of zine and magnesium organic compounds on ortho-formic ester, A., i, 10.

Shedd, Oliver M., volumetric estimation of potassium by the cobaltinitrite method, A., ii, 333.

Sheets, Guinnevere, the fruit of the Cornus paniculatum, A., ii, 527.

Shen, Bucchok. See Alexander Findlay. Shepard, Norman Arthur. See Treat Baldwin Johnson.

Shepherd, Earnest Stanley, and George A. Rankin, [with optical study by Fred Eugene Wright, the ternary system CaO—Al₂O₃—SiO₂; a study of the constitution of Portland cement clinker, A., ii, 725.

Sherman, Henry Clapp, and M. D. Schlesinger, amylases. III. Preparation and properties of pancreatic amylase, A., i, 827.

Sherrington, Charles Scott, and (Miss) S. C. M. Sowton, chloroform and reversal of reflex effects, A., ii, 753.

Shetterley, Fred Floyd. See Clarence Frederic Hale.

Shibata, Nagamichi, the behaviour of fats of animal organs in antiseptic preservation, A., ii, 304.

Shimazono, J., the hæmolytic action of the fat of rice (Oryza sativa, L.); hæmolysis of fatty acids, A., i, 765.

Shorey, Edmund C., and Elbert C.Lathrop, pentosans in soils, A., ii,

niethoxyl in soil organic matter, A., ii, 327.

Shorey, Edmund C. See also Oswald Schreiner.

Siau, Raymond L., new form of constant temperature drying oven, A., ii, 199.

Sichling, Konrad, nature of the photochlorides of silver and their potential in light, A., ii, 680.

Sidgwick, Nevil Vincent, Percival Pickford, and Bernard Howell Wilsdon, the solubility of aniline in aqueous solutions of its hydrochloride, T.,

1122; P., 127.
Sidgwick, Nevil Vincent, and Bernard
Howell Wilsdon, the conductivity and viscosity of aqueous solutions of aniline hydrochloride at 25°, T., 1118; P., 127.

Sidgwick, Nevil Vincent. See also Ernyst Ğraham Laws.

Siebeling, W. See Hermann Thoms.
Siegel, Erich, the effect of oxygen and the salts of the blood on the action of adrenaline, A., ii, 312.

Siegfried, Max, the action of mercuric chloride on glycine, A., i, 427.

conversion of glycine into iminodiacetic and triglycolamic acids, A., i, 774. trypsin action. The tryptic digestion of casein, A., ii, 126.

Siegfried, Max, and O. Weidenhaupt. action of carbon disulphide on aminoacids, A., i, 116.

Siegfried, Max, and R. Zimmermann, estimation of both phenol and p-cresol in utine, A., ii, 72, 941.

Sieglerschmidt, H., modulus of elasticity and thermal expansion of metals, A., ii, 851.

Siegmund, Wilhelm, quinhydrones, A., i, 654.

Siegrist, Hans. See Louis Pelet-Jolivet. Siemssen, J. A., a reaction for uranium salts, A., ii, 230. a reaction for uranium salts, A., ii,

773.

- Sieverts, Adolf, solubility of hydrogen in copper, iron, and nickel, A., ii, 895.
- Sieverts, Adolf, and E. Bergner, tantalum, tungsten, and hydrogen, A., ii, 990.
- Silber, J. M., the Wartha-Pfeiffer method of estimating the hardness of natural waters, A., ii, 228.
- Silber, Paul. See Giacomo Luigi Ciamician.
- Silberrad, Oswald, an improved Soxhlet condenser, A., ii, 877.
- Silberstein, Siegmund. See Bruno Bardach.
- Simion, Fritz. See Hermann Leuchs. Simmich, P., estimation of total fatty acids, A., ii, 233.
- Simmich, P. See also Adolf Beythien.
 Simon, Friedrich, differentiation of the tryptic and proteolytic (autolytic) actions of the liver, A., ii, 54.
- autolysis of the brain, A., ii, 745. Simon, M., balanophorin. I., A., i,
- 391. Simonot, E., rapid gravimetric estimation of urinary albumin, A., ii,
- 945. Simonsen, John Lionel, some reactions of gum kino, T., 1530; P., 194.
- Simpson, George Charles Edward, estimation of urobilin in the excreta and its value as a measure of hæmoglobin metabolism, A., ii, 309.
- Simpson, Sutherland, and Andrew Hunter, the possible vicarious relationship between the pituitary and thyroid glands, A., ii, 1112.
- Singer, Felix, theory of silicates, A., ii, 979.
- Singh, Puran, use of nickel hydroxide in tannin estimation, A, ii, 946.
- Sinner, K. See Karl Elbs.
- Sirk, Heinrich. See Cornelio Doelter. Sirovich, G. See Nicola Parravano.
- Sisley, Paul, and Charles Porcher, elimination of colouring matters by the animal organism, A., ii, 515.
- Sjöstedt, Ph. See Fritz Fichter.
- Sjöstrom, Lennart. See Juho Hämäläinen.
- Sjollema, Bouwe, significance of colloidal manganese oxide solutions in biochemical oxidations, A., i, 411.
- Skavronskaja, (Mlle.) N. A. See Sergius V. Lebedeff.
- Skita, Aladar, and H. H. Franck, reduction catalysts. V. Hydrogenation of alkaloids, A., i, 1017.
- Skita, Aladar, and Carl Paal, the reduction of unsaturated compounds, A., i, 449.

- Skita, Aladar, and H. Ritter, catalytic reduction. III., A., i, 71.
 - Sabatier's reduction and its reversibility, A., i, 272.
- Skrabal, Anton, the hypohalogenous acids and the hypohalogenites. III. Influence of electrolytes on the velocity of the hypoiodite reaction, A., ii, 382.
 - the hypohalogenous acids and the hypohalogenites. IV. The influence of electrolytes on the velocity of the hypobromite reaction, A., ii, 382.
- Skramlik, Emil von, urinary acidity, A., ii, 511.
- Skraup, Zdenko Hanns, A. von Biehler, R. Lang, E. Philippi, and J. Priglinger, the capillary rise of salts, A., ii 21
- Skraup, Zdenko Hanns, and B. Böttcher, methylation of gelatin, A., i, 247.
- Skraup, Zdenko Hanns, and Ernst Philippi, capillary rise of amines, phenols and aromatic hydroxy-acids, A., ii, 587.
- Skworzoff, I., aggregation and crystallisation of water in connexion with the physical condition of substances, A., ii, 970.
- Skworzow, Victor, hydrogenation of hydroaromatic compounds, A., i, 876.
- Slade, Roland Edgar, studies of ammonium solutions. Part I. An ammonium electrode, T., 1974; P., 242.
- Slansky, P. See Reginald Oliver Herzog. Slator, Arthur, gas regulator for thermo-
- stats, A., ii, 199.

 Sleeswyk, C., iodometric estimation of antipyrine in migrainine, A., ii, 80.
- Slemons, J. Morris. See Arthur Heinrich Koelker.
- **Slowtzoff**, B. J., chemical changes in the liver after phosphorus poisoning, A., ii, 315.
- Slowtzoff, B. J., and L. W. Soboleff, chemical changes in the liver in certain pathological processes, A., ii, 310.
- Sluiter, Carl H. nitrosonaphthols or naphthaquinoneoximes, A., i, 439.
- Sluyterman, Albertus, pharmacology of substances behaving like digitalis, A., ii, 911.
- Slyke, Donald D. van, method for the estimation of the aliphatic aminogroup; application to the chemistry of the proteins, urine, and enzymes, A., ii, 164.
 - estimation of aliphatic amino-groups; applications to the study of proteolysis and proteolytic products, A., ii, 779.

Slyke, Donald D. van, estimation of proline obtained by the ester method in protein hydrolysis; proline content of casein, A., ii, 780.

estimation of amino-groups in aminocompounds and in urine, and a method for the analysis of proteins,

A., ii, 944.

Slyke, Donald D. van, and George Frederic White, relation between the digestibility and the retention of ingested proteins, A., ii, 623.

digestion of protein in the stomach and intestine of the dog-fish, A., ii,

Slyke, Donald D. van. See also Emil Fischer, Moses Gomberg, and Phæbus A. Levene.

Smalley, William Miles. See Henry

Julius Salomon Sand.

Smedley, (Miss) Ida, the condensation of crotonaldehyde, T., 1627; P., 208.

Smeeth, William Frederick, a variety of riebeckite (bababudanite) and cummingtonite from Mysore, A., ii, 737.

Smetánka, Franz, the origin of uric acid

in man, A., ii, 218.

silas Samuel. See Harold Christo-Smiles, Samuel. See Harold Christo-pher, Hans Thacher Clarke, Thomas Percy Hilditch, (Miss) Effic Gwendoline Marsden, and William George Prescott. **Smirnoff**, S., action of isoamyl nitrite on

amines and amides, A., i, 427.

See N. S.

Smirnoff, Wladimir A. Konstaninoff.

Smirnoff, Wladimir I., and Nicolai S. Kurnakoff, definite compounds with variable composition of the solid phase. I. Electrical conductivity and hardness of the system magnesiumsilver, A., ii, 888.

Smith, Albert Malins. See Frederick

Frost Blackman.

Smith, Alexander, and Charles M. Carson, amorphous sulphur. VII. Freezing-point curves of liquid sulphur on separation of "nacreous sulphur" and rhombic sulphur respectively, A., ii, 977.

Smith, Alexander, and Alan W. C. Menzies, studies in vapour pressure. VI. Quantitative study of the constitution of calomel vapour, A., ii,

investigations of vapour pressure. VII. The vapour pressure of dried

calomel, A., ii, 492.

Smith, Carl E., volumetric estimation

of mercury, A., ii, 824.

Smith, Edgar Fahs, minerals from Berks County, Pennsylvania, A., ii, 501.

Smith, Edgar Fahs. See also William H. Chapin and Walter K. van Haagen.

Smith, George. See Philip H. Mitchell. Smith, George Frederick Herbert, crystalline form of nitrogen sulphide, A., ii. 1086.

Smith, George Frederick Herbert, and George Thurland Prior, schwartzembergite, A., ii, 1100.

fermorite and tilasite from the manganese-ore deposits of India, A., ii. 1103.

Smith, Henry Edgar. See Edward Percy Frankland.

Smith, Henry George. See Richard Thomas Baker.

Smith, Herbert J. See Herbert Newby McCoy.

Smith, James Lorrain, the staining of

fat by Nile-blue sulphate, A., ii, 57.

Smith, James Lorrain, and William

Mair, a method of isolating cholesterol and cerebrosides from brain by means of saponification with barium hydroxide in methyl alcohol, A., i, 44.

the effect of glycerol on the clearing point of cholesterol and cerebrosides,

A., i, 44.

the dichromate hæmatoxylin method of staining tissues, A., ii, 215. qualitative analysis of tissue lipoids,

A., ii, 1006. Smith, Warren R., and E. D. Leman,

analysis of nitrous oxide, A., ii,

Smith, Watson, ammonium sulphate and its instability: the hydrolytic dissociation of ammonium salts, A., ii,

Smits, Andreas, separation on the appearance of a solid phase, A., ii, 379.

retrogressive melting-point lines. II., A., ii, 855.

retrogressive vapour lines. 855.

application of the new theory of allotropy to the system sulphur, A., ii, 1077.

Smits, Andreas, and H. L. de Leeuw, confirmations of the new theory of the phenomenon of allotropy, A., ii, 263.

homogeneous allotropy in a pseudo-ternary system. The termolecular pseudoternary system acetaldehyde -paracetaldehyde-metacetaldehyde, A., ii, 871.

Smits, Andreas, and J. Maarse, the system water-phenol, A., ii, 870.

Smits, Andreas, and J. P. Treub, retrogressive melting-point lines. A., ii, 855.

the course of the P.T.-lines for constant concentration in the system etheranthraquinone, A., ii, 871.

Smolenski, K., non-protein nitrogenous substances in the sugar beet, A., ii,

a combination of glycuronic acid from the sugar beet, A., ii, 428.

Smoluchowski, Maryan, van der Waals' theory of the liquid state from the standpoint of viscosity phenomena, A., ii, 258.

Smyth, Louis B. See John Joly.

Smythe, John Armstrong, benzyl ortho-

thioformate, A., i, 966. Snow, Ernest Charles, variations in the distribution of a-particles, A., ii, 682. Sobbe, O. von., a new reaction for the detection of hydrogen peroxide, A., ii,

Sobecki, Wladislaus. See Julius von Braun.

Soboleff, L. W. See B. J. Slowtzoff.

Sobolewa, W., and J. Zalewski, estimation of acetaldehyde by means of pyrrole, and application of this method to the estimation of lactic acid, A., ii,

Société Chimique des Usines du Rhône, preparation of o-nitrobenzaldehyde, A., i, 987.

Soddy, Frederick, the chemistry of mesothorium, T., 72.

attempts to evaluate the period of ionium, A., ii, 6.

Soddy, Frederick, and Arthur John Berry, conduction of heat through rarefied gases. II., A., ii, 253.

Soddy, Frederick. See also (Miss) Ruth Pirret and Alexander Smith Russell.

Söhngen, N. L., heat resistant lipase, A., i, 825.

fat-splitting by bacteria, A., ii, 319. lipase produced by bacteria, A., ii, 639.

Soellner, Julius, fayalite from the island of Pantelleria, A., ii, 502.

Sörensen, Sören Peter Lauritz, and E. Jürgensen, the heat coagulation of proteins. I. Is the hydrogen ion concentration altered on coagulation? A., i, 405.

Sofianopoulos, Ath. J., two new compounds of stannous chloride with

ammonia, A., ii, 403.

Sokoloff, N., composition of a radioactive Caucasian mineral, A., ii, 498.

composition of the mud and water of Lake Tinaksk, Astrakhan, A., ii, 502.

Sollmann, Torald, response of gums and similar substances to Moore's reaction, A., ii, 547.

Soloweeff, S. K. See Efim Semen London. Sommelet, mmelet, Marcel, γ-ethoxy-α-alkylacetoacetic esters, A., i, 109.

Sommerfeldt, Ernst, the isomorphism of potassium and sodium compounds, A.,

Somogyi, Sigmund von, the partition of the urinary nitrogen after enteral and parenteral feeding on protein, A., ii, 416.

Sone, Masuo. See Fritz Ullmann.

Sonnenberg, E. See A. Goldsobel. Sorkau, Walter, the viscosity of certain

organic liquids in the condition of turbulent flow, A., ii, 793.

Sornay, P. de, estimation of sulphuric acid in soils, A., ii, 1027. Sornet, René. See Marcel Delépine.

Sosman, Robert B., minerals and rocks of the composition MgSiO₃—CaSiO₃— FeSiO₃, A., ii, 992.

Sosman, Robert B.
Louis Day. See also Arthur

Soukup, Arn. See Josef Hanuš. Sowton, (Miss) S. C. M. See Charles Scott Sherrington.

Spät, Wilhelm, the decomposing power of water bacteria, A., ii, 1121.

Spät, Wilhelm. See also Edmund Weil. Spath, Ernst. See Rudolf Wegscheider. Spence, David, and J. C. Galletly, action of chromyl chloride on indiarubber, A., i, 314.

Spence, David, J. C. Galletly, and J. H. Scott, estimation of caoutchouc as tetrabromide; the decomposition of the bromide by nitric acid, A., ii,

Spence, David, and J. H. Scott, chemistry of caoutchouc; theory of vulcanisation, A., i, 657.

chemistry of caoutchouc. II. Physicochemical investigation of the ex-

traction of resin, A., i, 801. Spencer, (Miss) F. Grace C. See Richard Sidney Curtiss.

Spencer, James Frederick, employment of an electrode of the third type to measure the potential of the thallium ion, A., ii, 364.

Spengel, A. See Lothar Wöhler. Spengler, Theodor. See Amé Pictet.

Speranski, Alexander, vapour pressure and integral heat of solution for saturated solutions, A., ii, 1065.

Speransky, Alexander W., and A. Pavlinova, solidification of aqueous solutions of metallic chlorides, A., ii, 1087.

Speyer, Edmund. See Martin Freund. Spezia, Giorgio, pressure acting alone has no effect in the transformation of opal into quartz, A., ii, 497.

some presumed chemical effects of pressure in mineral metamorphism, A., ii, 903.

Spindler, Franz, the catalase of milk, A., ii, 133.

Spiro, Karl, the theory of swelling, A., ii, 379.

Spitalsky, Eugen, catalytic decomposition of hydrogen peroxide in a homogeneous medium, A., ii, 36.

catalysis of hydrogen peroxide, A., ii,

a simple flask and an arrangement for carrying out chemical reactions, A., ii, 225.

See J. Tillmans. Splittgerber, A. electro-Spring, Walthère [Victor], phoresis of lampblack, A., ii, 15.

the saturation capacity of colloidal compounds, A., ii, 102.

Spurrier, H., prevention of bumping, A., ii, 965.

rapid filtering funnel, A., ii, 976.

Squintani, V. See Luigi Marino.

Srebnitsky, W., speed of propagation of

chemical reactions, A., ii, 872. Stackelberg, Eduard von, tabular grouping of the elements on the basis of the periodic system, A., ii, 708.

Stadeler, A., uniform method for the estimation of carbon in all iron alloys, A., ii, 538.

Stadler, Ed., and H. Kleeman, hæmolysis by ammonia, A., ii, 996.

hæmolysis by acetic acid, A., ii, 996.

Stadler, Hermann, the tonic effect of certain organic substances in solution and as vapours, A., ii, 233.

Stadnikoff, George L., mechanism of the reaction in the formation of organomagnesium compounds, A., i, 435.

Stadnikoff, S. See Nicolai D. Zelinsky. Stähler, Arthur, and Fritz Bachran,

titanium. IV., A., ii, 1096. Stähler, Arthur, and Friedrich Meyer, the ratio of the molecular weights of potassium chlorate and potassium chloride, A., ii, 881.

Erik Schirm, Stähler, Arthur, and existence of chlorosulphinic esters, A., i, 174.

Stafford, O. J., and H. von Wartenberg, the dissociation equilibrium S₈ \(\simeq 4S_2\), A., ii, 700.

Stahl, H. S. See Howard S. Read. Stahl, Willy, the spectra of argon, A., ii, 449.

Staněk, Vladimir, dehydration of substances by means of ether, A., ii,

the detection of chromium in steel, A., ii, 443.

the localisation of betaine in plants, A., ii, 818.

the wandering of betaine in certain vegetative processes in plants, A., ii, $11\bar{2}4.$

Staniewski, M. See Tadeusz Estreicher. Starck, Gunnar, new method for the estimation of fluorine, A., ii, 436.

Starck, Gunnar, and Max Bodenstein, dissociation of iodine vapour, A., ii, 20.

Stark, Johannes, [spectroscopic investigations], A., ii, 558.

the Doppler effect of hydrogen canal rays, A., ii, 568.

the carrier and the emission centre of series lines, A., ii, 678.

applications of the doctrine of finite increments of energy to physicochemical questions, A., ii, 785.

application of a valency hypothesis to

fluorescence, A., ii, 786.

Stark, Otto, and P. Horrmann, relationships between perbromides and bromosubstitution products observed with acetylacetonecarbamide [4:6-dimethyl-2-pyrimidone] and its tautomeride, A., i, 572.

Starkenstein, Emil, the biological significance of inositol-phosphoric acid

(phytin), A., ii, 132. ionic action of the phosphoric acids, A., ii, 513.

the behaviour of uranyl salts of dibasic phosphoric acids with indicators, A., ii, 537.

the independence of the diastatic action on the lipoids, A., ii, 747.

the influence of phenylcinchonic acid (atophan) on purine metabolism, A., ii, 753.

Starkenstein, Emil. See also Richard H. Kahn.

Starling, Walter William. See George Barger.

Stasevitsch, N., equilibrium in the system composed of zinc nitrate, ammonia, and water, A., ii, 476.

Stassoff, B. D. See Efim Semen London. Statescu, C., solution of salts, heterogeneously magnetic in a heterogeneous magnetic field, A., ii, 850.

Statescu, C. See also Woldemar Voigt. Staudinger, Hermann, ketens. XIX. Formation and preparation of diphenylketen, A., i, 650.

Staudinger, Hermann, and Stanislaw Bereza, ketens. III. Action of diphenylketen on quinones, A., i, 459.

Staudinger, Hermann, Stanislaw Bereza, Hermann Göller, Josef Meyer, and XVI. Josef Modrzejewski, ketens. Formation and fission of four-membered rings, A., i, 306.

Staudinger, Hermann, Stanislaw Bereza, Helmut William Klever, and Josef Mayer, ketens. XVIII. Phenylketen

and methylketen, A., i, 307.

Staudinger, Hermann, and Karl Clar, ketens. XX. Attempts to prepare quinoketens, A., i, 688.

Staudinger, Hermann, Karl Clar, and Emerich Czako, ketens. XXIII. The reactivity of halogen atoms towards

metals, A., i, 624.

Staudinger, Hermann, Hermann Göller, and Max Reinhold Schöller, ketens. XVIII. Decomposition of benzilic

acid, A., i, 308.

Staudinger, Hermann, and Sergius
Jelagin, ketens. XV. Action of diphenylketen on nitroso-compounds, A., i, 215.

Staudinger, Hermann, and Helmut William Klever, isoprene from terpene hydrocarbons, A., i, 731.

Staudinger, Hermann, and N. Kon, ketens. V. Reactivity of the carbonyl group, A., i, 876.

Staudinger, Hermann, and Otto Kupfer, XXII. Attempts to preketens. pare ω-methoxyphenylketen, A., i,

attempted preparation of methylene derivatives, A., i, 702.

action of hydrazine on carbonyl com-

pounds, A., i, 751.

Staudinger, Hermann, and Erwin Ott, ketens. XXI. Attempts to prepare alleneketens, A., i, 639.

Staudinger, Hermann, and Leopold Ružička, ketens. IV. Phenylmethyl-Leopoldketen, A., i, 462.

Stead, G., anode and cathode spectra of various gases and vapours, A., ii,

separation of spectra in compound gases, A., ii, 1041.

Steche, Otto. See Percy Waentig. Stecher, Emil. See Franz Fischer.

Steel, Matthew, Folin's method for the estimation of urinary ammonia nitrogen, A., ii, 68.

absorption of aluminium from alumin-

ised foods, A., ii, 507.

Steele, Victor, the action of hydrogen oyanide on carvone hydrosulphide, P., 240.

Steele, Victor. See also Arthur Lapworth.

Stein, A., molecular vibrations of solid substances, A., ii, 84.

Steinbach, Alfred. See Hans Rupe.

Steinberg, J. See Friedrich Kehrmann. Steinbrecher, Ernst.See Johannes Gadamer.

Steinfels, W., estimation of glycerol, A., ii, 159.

Steinhorst, H. See Arthur Kötz.

Steinkopf, Wilhelm, filtering apparatus for substances which are hygroscopic or altered by exposure to air, A., ii,

apparatus for preserving and measuring poisonous, hygroscopic, or low-boil-

ing liquids, A., ii, 106.

Steinkopf, Wilhelm, and Erwin Blümmer, some ethers of cholesterol, A., i, 971.
Steinkopf, Wilhelm, and H. M. Daege,

aliphatic nitro-compounds. IX. Action of phenylcarbimide on sodium nitromethane and nitroethane, A., i, 280. Steinkopf, Wilhelm, and Boris Jürgens,

aliphatic nitro-compounds. X. Hydroxamyl chlorides, A., i, 530.

Wilhelm,Steinkopf, WiatscheslawMalinowski, and Alexander Supan, action of hydrogen chloride and methyl alcohol on negatively substituted nitriles, A., i, 946.

Steinkopf, Wilhelm, and Johann Sargarian, composition of tannin, A., i,

Steinkopf, Wilhelm, and AlexanderSupan, aliphatic nitro-compounds. VIII. a-Nitropropionic acid, A.,

aliphatic nitro-compounds. Nitroisobutyric acid, A., i, 946.

Steinmann, Albert, assay of silver by the touchstone, A., i, 658.

assay of platinum, A., ii, 1035.

Steinmetz, H. See Ernst Weinschenk. Stepp, Wilhelm, the importance of lipoids

in nutrition, A., ii, 1002. Steppuhn, O. See Hartwig Franzen and Rudolf Gottlieb.

Sterba, Johann, the radioactivity of the spring sediments of Teplitz-Schönauer, A., ii, 360.

Stern, (Mlle.) Lina. See Fr. Battelli. Steubing, Walter, spectroscopy of oxygen, A., ii, 558.

a new radiant emission from the spark, A., ii, 838.

Steudel, Hermann, histo-chemistry of spermatozoa, A., ii, 626, 905.

Steudel, Hermann, and Percy Brigl, thymic acid, A., i, 342.

Steuer, O. R. See Emilio Noelting.

Stevens, Hannah, and Clarence B. May, decomposition of uric acid by organic alkaline solvents, A., i, 403.

Stevenson, Reston. See Charles Baskerville.

Stewart, Alfred Walter, the carbonyl group in the nascent state, A., i, Ž10.

Stewart, Alfred Walter, and RobertWright, absorption spectra. IV. Influence of the solvent and of dilution on the validity of Beer's law, A., ii, 1043.

Stewart, Alfred Walter. See also Cecil Reginald Crymble.

Stewart, M. A. See Arthur Amos Noyes.

Stiasny, Edmund. See Ramni Paniker. Stobbe, Hans, mono- and di-ethyl esters of diphenylitaconic acid, A., i, 540. isomerism and isomorphism of the

yellow and the red fluorenones, A., i, 651. transformations of allo- and iso-

cinnamic acids in the fused and crystalline states, A., i, 859.

isomerism and polymorphism, A., ii, 970.

Stobbe, Hans, Theodor Badenhausen, Erich Benary, Richard Eckert, Ferdinand Gademann, Richard Härtel, Rudolf Hennicke, Harald Kalning, Kautzsch, CurtKohlmann, KarlKarl Leuner, Alfred Lenzner, Georg Posnjak, Gustav Reddelien, Robert Rose, Siegfried Seydel, Walter Vieweg, and Emil Wahl, fulgides, A., i. 373.

Stobbe, Hans, and Erich Ebert, bleaching and polymerisation, A., ii, 452.

absorption of light of some corresponding ethane, ethylene, acetyl derivatives, A., ii, 561.

fluorescence and radioluminescence of some hydrocarbons with ethane, ethylene, and acetylene residues, A., ii, 562.

Stobbe, Hans, and Fritz Reuss, refraction of light by allo- and iso-cinnamic acids, A., i, 859.

Stobbe, Hans, and Conrad Rücker, action of light on cinnamylideneacetophenone, A., i, 385.

Stock, Alfred, and Herbert Blumenthal,

carbon telluride, CTe₂, A., ii, 722. Stoddart, Charles W., and C. W. Hill, the stearate separation of the rare earths, A., ii, 727.

Stoecklin, Eloi de, oxydase properties of oxyhæmoglobin, A., ii, 620.

Stoecklin, Eloi de. See also Jules Wolff.

Stoermer, Richard, and K. Brachmann, "oxindigo" [2:2'-diketo-Δ^{1:1}'-dicoumaran], A., i, 220.

Stoermer, Richard, Egon Friderici, Bräutigam and W. Neckel, conversion of stable stereoisomerides into labile modifications by ultra-violet light. II., A., i, 295.

Stoermer, Richard, Claus Decker, and Karl Hildebrandt, migration of phenyl in the synthesis of phenylated coumarones; phosphorus tribromide as a reducing agent. III., A., i, 664.

Stoermer, Richard, and C. Friemel, action of phenol on methylcoumaric acid dibromide and the constitution of Werner's "hydroxyphenylcoumaran," A., i, 632.

Stötter, Hermann. See Martin Onslow Forster.

Stoffel, A., formation of iron carbonyl, A., ii, 986.

Stoklasa, Julius, biochemical circulation of the phosphate ion in soils, A., ii,

physiological importance of manganese and aluminium in the vegetable cell, A., ii, 643.

Stoklasa, Julius, and Wenzel Zdobnicky. photochemical synthesis of carbohydrates from carbon dioxide and hydrogen in the absence of chlorophyll, A., i, 178.

photochemical synthesis of carbohydrates in absence of chlorophyll, A., i, 769.

Stoll, Arthur. See Richard Willstätter. Stollé, Robert, action of hydrazine hydrate on sodamide, A., ii, 201.

preparation of ethyl oxalhydrazinate, A., i, 357. acetaldehyde-hydrazine, A., i, 421.

Stolle, Robert, and J. Laux, new method of preparation of azo-compounds, A., i, 508.

Stolte, Karl, a method for ash analysis, A., ii, 946.

Stolte, Karl. See also Richard Lederer. Stoltzenberg, H., determination of melting points of crystalline liquids, A., ii, 697.

Stortenbeker, Willem, an acid potassium sulphate, A., ii, 392.

Stoward, Frederick, influence of certain acids on the inversion of sucrose by

sucrase [invertase], A., i, 1052. Stracham, Earle K. See Richard Sidney Curtiss.

Strachan, James, the "Hughes reaction" of potassium iodide on paper, and its bearing on the question of acidity in paper, A., ii, 542.

Strachan, James, catalytic action of copper oxide, A., ii, 606.

Strassner, Walter, the reducing action of the tissues, A., ii, 57.

Straub, Jan, constitution of the compound of silver chloride with ammonia, A., ii, 883.

Strauch, Friedrich Wilhelm, comparative observations on the composition and cleavage of different kinds of silk. XII. The monoamino-acids from the "gelatin" of Indian tussore silk, A., i, 511.

Strauch, Friedrich Wilhelm. See also Emil Abderhalden.

Strauss, K. See Hans Reckleben and Johannes Scheiber.

Strecker, Wilhelm, and Paul Schiffer, titration of phosphates, A., ii, 768.

Streintz, Franz, migration of ions in the water voltameter, A., ii, 15.

Stremme, Hermann, acid content of moor water, A., ii, 70.

allophane, halloysite, and montmorillonite are mixtures of colloidal alumina and silica, A., ii, 406.

Strohmer, Friedrich, Hermann Briem, and Ottokar Fallada, the influence of light on the composition of the sugarbeet, A., ii, 763.

Friedrich, Strohmer, and OttokarFallada, presence of optically active non-sugars in the beet influencing the polarisation results, A., ii, 427.

Strong, W. W. See Harry Clary Jones. Strübell, Paul. See Emil Abderhalden. Strübin, Paul. See Adolf Kaufmann.

See Struensee, Richard. WaltherSchrauth.

Strutt, (Hon.) Robert John, a chemically active modification of nitrogen produced by the electric discharge, A., ii, 482.

the flame arising from the nitrogenburning arc, A., ii, 1056.

Strutt, (Hon.) Robert John. See also Alfred Fowler.

Struve, Karl. See Robert Behrend.

Strzelecka, Marya, the action of ammonia on aromatic thiocyanates, A., i,

Stuart, A. T., Volhard's method for the estimation of chlorine in potable waters, A., ii, 926.

Stubbs, Clifford Morgan, the influence of inactive electrolytes on the optical activity of l-malic acid in aqueous solution, T., 2265; P., 225.

Studzinski, J., the depressor action of the suprarenals, A., ii, 509.

Stutzer, Albert, analysis of calcium cyanamide, A., ii, 777.

Stutzer, Albert, and Goy, estimation of calcium nitrate and calcium nitrite, A., ii, 933.

Suckrow, Fritz. See Bernhard Schöndorff.

Sudborough, John Joseph, and Stanley Hoskings Beard, additive compounds of phenols and phenolic ethers with aromatic polynitro-derivatives, 209; P., 5.

Sudborough, John Joseph, and Ebenezer Thomas, the separation of mixtures of organic acids by partial esterification, T., 2307; P., 279.

Sudborough, John Joseph. See also Ebenezer Recs Thomas.

Süsser, Arthur. See Heinrich Wieland. Supfle, Karl, estimation of iron, ammonia, and nitrous acid in waters by means of the Autenrieth-Koenigsberger colorimeter, A., ii, 940.

Suida, Hermann, jun., unsymmetrical aromatic derivatives of oxamide. II., A., i, 365.

Suida, Wilhelm, salt formation by amino-

phenols, A., i, 284. Sullivan, Michael Xavier. See Oswald Schreiner.

Sulze, Walter. The carbamino-reaction, A., ii, 128.

Sumner, J. B. See Henry Augustus Torrey.

Sundwik, Ernst Edward, xanthine substances from uric acid, A., i, 584. beeswax. III. Are the alcohols from

psyllawax and beeswax identical? A., i, 599.

Supan, Alexander. See Wilhelm Stein-

Surre, Léon, estimation of nicotine in the presence of pyridine bases, A., ii, 778.

Sutherland, (Miss) Brenda. See (Miss) Leila Green.

Sutherland, (Miss) Maggie Millen Jeffs. See George Gerald Henderson.

Sutherland, William, weak electrolytes, and towards a dynamical theory of solutions, A., ii, 703.
Sutthoff, W. See J. Tillmans.

Suwa, Akikazu, the fate of non-nitrogenous components of aromatic aminoacids in the normal body, A., ii, 634.

Suzuki, Shigehiro, the formation of oxides of nitrogen during denitrification, A., ii, 916.

Svedberg, Andrea Andreen. See The

Svedberg.

zedberg, The, and Katsuji Inouye,

Gay I ussac laws Svedberg, validity of the Boyle-Gay-Lussac laws for colloidal solutions. II., A., ii, 703.

Svedberg, The, and Katsuji Inouye, the structure of ultramicroscopic particles, A., ii, 866.

ultramicroscopic observation of a temperature coagulation, A., ii, 1077.

Svedberg, The, and Andrea Andreen Svedberg, rate of diffusion and relative size of dissolved molecules, A, ii, 375.

Sventoslavsky, Wojcieck, thermochemical analysis of tautomeric compounds, A., ii, 188.

thermochemical studies. IV. Diazoand azo-compounds, A., ii, 667.

thermochemical studies. V. Diazoand azo-compounds; monoamines, A., ii, 967.

Swarts, Frédéric, fluorobromo derivatives containing two atoms of carbon, A., ii, 762.

Swinburne, James, separation of oxygen by cold, A., ii, 387.

Symes, William Legge, and Victor Herbert Veley, the effect of some local anæsthetics on nerve, A., ii, 508.

Symes, William Legge. See also John Addyman Gardner and Victor Herbert Veley.

Synder, Charles D., the meaning of variation in the magnitude of temperature-coefficients of physiological processes, A., ii, 618.

Synder, Charles D., and Martillus H.
Todd, viscosity of body fluids, A., ii,
617

Sypkens-Toxopéus, W. See Otto A. Oesterle.

Szathmáry, Ladislaus Sz., calcium silic-

ates in cement, A., ii, 40.

Széki. Tibor, new derivatives in the triphenylmethane series. A i 634

triphenylmethane series, A., i, 634. Széki, Tibor. See also Rudolf Fabinyi. Szilard, Béla, the chemical reactions of

radioactive elements, A., ii, 172. an apparatus for the measurement of radioactivity, A., ii, 565.

Sznajder,, L. See Adolf Kaufmann.

T.

Taboury, Felix, preparation of bromides from primary and secondary saturated alcohols, A., i, 173.

Taboury, Felix. See also Fernand Bodroux and Marcel Godchot.

Tachau, Hermann. See Ernst Friedmann.

Tafel, Julius, unsaturated lead alkyls, A., i, 187.

Tafel, Julius, and Bruno Emmert, electrolytic reduction of lævulic acid and a-dimethyl-lævulic acid, A., i, 764.

Tafel, Julius, and August Herterich, 1-methyldeoxyxanthine, A., i, 506.

Tafel, Julius, and Wilhelm Schepss, the electrolytic reduction of anisaldehyde, A., i, 784.

A., 1, 784.Taffanel, J., safety explosives employed in mines, A., ii, 38.

Tahara, Yoshisumi, tetrodon poison, A., ii, 133.

Tait, John. See Harold Pringle.

Takahashi, Dengo. See Leonor Michaelis and Peter Rona.

Takemura, M., accumulation of iodine in the tissues of tumours, A., ii, 633.

Tamburini, Astorre. See Francesco Carlo Pelazzo.

Tammann, Gustav [Heinrich Johann Apollon], equilibrium diagram of silver iodide, A., ii, 195.

abnormal dependence of the velocity of crystallisation on the temperature, A., ii, 376.

Tanaka, Masahiko, calcium resorption and calcification, A., ii, 907.

Tangl, Franz, the work of the kidneys and the "specific-dynamic action" of food-stuffs, A., ii, 748.

Tangl, Franz, and Alexander Erdélyi, the influence of the melting point of fats on their rate of disappearance from the stomach, A., ii, 742.

Tangl, Franz, and Georg von Kereszty, a wet method for the estimation of carbon in organic substances, A., ii, 538.

Tassilly, Eugène, "alcoholysis" of Japan wax, A., i, 602.

Tassilly, Eugène, and J. Leroide, relative preparations of arsenic present in marine algae and their preparations, A., ii, 142.

Taurel and Griffet, estimation of the proportion of sublimed sulphur in a mixture of different sulphurs, A., ii,

Taylor, Alonzo Englebert, the cutaneous elimination of nitrogen, sulphur, and phosphorus, A., ii, 307.

estimation of urea, A., ii, 344.

sources of error in the Folin method of estimating creatinine, A., ii, 344.

the sulphur balance in metabolism, A., ii, 410.

output of ammonia in normal urine, A., ii, 415.

Taylor, (Miss) Clara Millicent. See Thomas Hill Easterfield.

Taylor, Hugh Stott. See Henry Bassett, jun.

Taylor, (Miss) Millicent. See James William McBain.

Taylor, Murray Ross, creatine and creatinine excretion in diabetes mellitus, A., ii, 310.

Taylor, Robert Llewellyn, the action of chlorine on alkalis and of carbon dioxide on bleaching powder, T., 1906; P., 243.

Taylor, Thomas Smith, the ionisation of different gases by the α -particles from polonium and the relative amounts of energy required to produce an ion, A., ii, 354.

Taylor, W. E., the precipitation of aluminium hydroxide in the granular form, A., ii, 542.

Taylor, William Henry. See William Colebrook Reynolds.

Tcharviani and Max Wunder, separation of iron, chromium, and aluminium, **A**., ii, 156.

Teletoff, *I. S.*, inorganic peroxides. Preparation of cadmium and zinc peroxides, A., ii, 490.

Telle, H., and E. Huber, methods of detecting indole in bacteria cultures; formation of indole by Typhaceæ, A., ii, 317.

Ter-Gazarian, G., density of hydrogen phosphide and atomic weight of phosphorus, A., ii, 201.

a general relation between the physical properties of substances; application to densities, A., ii, 1066.

Terni, A. See Roberto Ciusa.

Terroine, Emile F., lecithin and diastatic

action, A., ii, 997. sdorpf, Theodor. See WilhelmTesdorpf, \mathbf{A} utenrieth.

Test, Charles D. See Herbert Newby McCoy.

Thaer, Will, effect of lime and humus on the mechanical and physical properties of clay, loam, and sandy soils, A., ii, 648.

Thibaut, R., specific heat of different gases and vapours, A., ii, 695. Thiele, Carl. See Franz Fischer.

Thiele, Johannes, the constitution of aliphatic diazo-compounds and of azoimide, A., i, 845.

Hans. See Hermann Thierfelder, Loening.

Thole, Ferdinand Bernard, note on the preparation of labile benzaldehydephenylhydrazone, P., 278.

Thole, Ferdinand Bernard, and Jocelyn Field Thorpe, the formation and reactions of imino-compounds. Part The production \mathbf{of} iminoderivatives of piperidine leading to the formation of the \$\beta\$-disubstituted glutaric acids, T., 422; P., 42.

Thole, Ferdinand Bernard, and Jocelyn Field Thorpe, the formation and reactions of imino-compounds. Part XVI. Reactions leading to the formation of tricarballylic acid, T., 1684; P., 219.

the probable cause of the elimination of a carbethoxyl group as ethyl carbonate by the action of sodium ethoxide, T., 2183; P., 252.

the chemistry of the glutaconic acids. Part I. Methods for the preparation of alkylglutaconic acids which prove the identity of the α - and γ -positions in the glutaconic acid molecule, T., 2187; P., 122.

chemistry of the glutaconic acids. Part II. The reactions of the alkylglutaconic acids having one mobile hydrogen atom, T., 2208; P.,

252.

Thole, Ferdinand Bernard. See also Albert Ernest Dunstan.

Thomae, Carl, ultra-microscopic observations, A., ii, 866. constitution of apples, A., ii, 920.

Thomas, Ebenezer Rees, and John Joseph Sudborough, the direct esterification of saturated and unsaturated acids, P., 314.

Thomas, Ebenezer Rees. See also John Joseph Sudborough.

Thomas, Fred. See Ivor Southwell Cardell.

Thomas, John Smeath. See Frederick George Donnan.

Thomas, Pierre, substances accompanying oxyhæmoglobin in its crystallisation, A., i, 590.

Thomas, Ruth. See James F. Norris. Thomas, Wilhelm. See August Michaelis.

Thomason, the behaviour of lead compounds in the human stomach, A., ii,

Thomlinson, John C., estimation of free ammonia and ammonium carbonate by titration, A., ii, 151.

Thompson, Firman. See H. P. Bassett.
Thompson, Hugh Vernon, a copper
derivative of quinol, P., 155.
Thoms, Hermann, and W. Drauzburg,

products of the action of nitric acid

on dihydroanethole, A., i, 716. Thoms, Hermann, and W. Siebeling, the elimination of methoxy-groups from phenolic ethers by means of nascent hydrogen, A., i, 717.

action of nitric acid on trimethylgallic [3:4:5-trimethoxybenzoic] acid and its methyl ester; constitution of antiarol, A., i, 724.

Thomsen, Th. Sv., double salts of antimony pentachloride with various alkaloid hydrochlorides, A., i, 484.

Thomson, (Sir) Joseph John, rays of positive electricity, A., ii, 457.

Thomson, William, estimation of indigotin in the presence of starch, A., ii, 346.

the amount of metabolism produced by the breathing of town and country air, and of dry and damp air as measured by the carbon dioxide expired. A., ii, 408.

Thomssen, Edgar G. See John Livingston Rutgers Morgan.

Thorkelsson, Thorkell, [radioactivity of] the hot springs of Iceland, A., ii, 9.

three forms of the equation of condition and the internal heat of vaporisation, A., ii, 855.

Thornton, William M., jun., a felspar aggregate from Nelson Co., Virginia, A., ii, 406.

Thorpe, Joselyn Field, note on the preparation of β-hydrindone, P., 128.

Thorpe, Jocelyn Field. See also Gustave Louis Blanc and Ferdinand Bernard Thole.

Thorvaldson, Thorbergur. See Gregory Paul Baxter.

Thugutt, Stanislaus J., are allophane, halloysite, and montmorillonite simple minerals or mixtures of colloidal alumina and silica? A., ii, 210.

chemistry of cancrinite, A., ii, 298. colour reactions of calcite and aragonite, A., ii, 334.

allophane, halloysite, and montmorillonite, A., ii, 501.

metameric natrolite, A., ii, 736.

Thunberg, Torsten, auto-oxidisable substances and systems of physiological interest. I. and II., A., ii, 33.

the influence of different substances on the gaseous exchange of the surviving muscular tissue of frogs. IV.—IX., A., ii, 56. influence of various substances on the

influence of various substances on the gaseous interchange of surviving frog's muscle. X., A., ii, 627.

Thurnauer, Gustav, estimation of sulphur in brass and bronze, A., ii, 150.

Tian, A., nature of the decomposition of hydrogen peroxide by light, A., ii, 35.

decomposition of water by ultra-violet light, A., ii, 452.

radiations decomposing water and the extreme ultra-violet spectrum of the mercury arc, A., ii, 564.

Tichwinsky, M. M., apparatus for continuous fractional distillation, A., ii, 876.

Tiebackx, F. W., simultaneous coagulation of two colloids, A., ii, 378.

the coagulum from gelatin-gum arabic sols, and its analogy to casein, A., ii, 591.

the system gum arabic—gelatin, A., ii, 868.

Tiede, Erich, and Franz Fischer, distillation of tin in a vacuum, A., ii, 731.

Tiede, Erich. See also Franz Fischer.
Tiffeneau, Marc, p-hydroxybenzylmethylamine and -dimethylamine,
A., i, 778.

p-hydroxybenzylamine, A., i, 810.

3:4-dihydroxybenzyl-methyl and -dimethylamines, A., i, 972.

Tigerstedt, Robert, ash constituents in ordinary diets of human beings, A., ii, 412.

Tillmans, J., detection and estimation of nitric acid in milk by means of the diphenylamine-sulphuric acid test, A., ii, 151.

the quantity of nitric acid present in wines, A., ii, 930.

Tillmans, J., and O. Heublein, estimation of free carbon dioxide in water, A., ii, 70.

the titration of alkali carbonates in the presence of alkali hydroxides and of bicarbonates, A., ii, 658.

Tillmans, J., and A. Splittgerber, estimation of nitric acid in milk by means of diphenylamine-sulphuric acid, A., ii, 1132.

Tillmans, J., and W. Sutthoff, detection and estimation of nitric and nitrous acid in waters, A., ii, 767.

Timmermans, Jean, the critical phenomena of dissolution of mixtures with normal components examined under variable pressure, A., ii, 193. solidification point of some organic

liquids, A., ii, 854.

Timmermans, Jean. See also Philipp
Kohnstamm.

Tingle, John Bishop, oxidation of arsenious and antimonious oxides, A., ii, 1086.

Tingle, John Bishop, and S. J. Bates, derivatives of camphoroxalic acid. XIII., A., i, 54.

Tinkler, Charles Kenneth, the constitution of berberine, T., 1340; P., 162.

Tipper, George Howlett, samarskite, etc., from Madras, A., ii, 1105.

Tir, L. See Carl Neuberg.

Tischkoff, P. See Paul N. Raikoff.

Tischner, Walter. See Gustav Heller. Tischtschenko, Iv. See Leo A. Tschu-

gaeff.

Titherley, Arthur Walsh, and William Longton Hicks, the condensation of acetyl chloride and salicylamide, T., 866 ; P., 102.

Titherley, Arthur Walsh, and Ernest Chislett Hughes, the action of ammonia and amines on 2-phenyl-1:3benzoxazine-4-one, T., 1493; P., 190. Titherley, Arthur Walsh. See also

Ernest Chislett Hughes.

Titoff, W. S., the estimation of radium

emanation by the ionisation current, A., ii, 685. Tobler, Oscar, and R. Caramelli, the

analysis of tartrates, A., ii, 447. Todd, George W., the mobility of the

positive ion in gases at low pressure, A., ii, 245. mobility of positive ions produced from

heated aluminium phosphate in gases at low pressure, A., ii, 1050.

Todd, Martillus H. See Charles D. Snyder.

Todo, Yoshinori. See Mitsuru Kuhara. Tokarski, J. See Stanislaw Tołłoczko. Tollens, Bernhard. See K. H. Böddener, Migaku Ishida, and J. Louis Wichers.

Tołłoczko, Stanislaw, the rate of dissolution of selenite at different crystalline

surfaces, A., ii, 24.

Tołłoczko, Stanislaw, and M. Meyer, the latent heat of fusion of antimony trichloride and tribromide, arsenic trichloride, and stannic bromide in relation to the molecular depression of their freezing points, A., ii, 187.
Tolloczko, Stanislaw, and J. Tokarski,

the rates of growth and dissolution of crystals in relation to the reversibility of these processes, A., ii, 25.

Tolman, Richard C., electromotive force produced in solutions by centrifugal

action, A., ii, 248.
Tommasina, Th. See Edouard Sarasin. Tonegutti, Mario, a lipolytic enzyme in sweet almonds, A., ii, 525.

Topi, M. See L. Danesi.

Topp, Ernst. See Heinrich Biltz.

Torquati, Torquato, the formation of hordenine during the germination of barley, A., ii, 523.

Torrey, Henry Augustus, and Roger Adams, phenols insoluble in alkalis,

A., i, 39.

Torrey, Henry Augustus, and Eugene James Cardarelli, some derivatives of 2-acetyl-α-naphthol, A., i, 67.

Torrey, Henry Augustus, and William Hammett Hunter, red and white silver salts of 2:4:6-tribromophenol, A., i 283.

Torrey, Henry Augustus, and Charles Walter Porter, some derivatives of p-aminobenzhydrol, A., i, 340.

Torrey, Henry Augustus, and H. R. Rafsky, 1-benzoylphenyl-3-methyl-5pyrazolone, A., i, 84.

Torrey, Henry Augustus, and J. B. Sumner, some properties of piperonyl-

oin, A., i, 66.

Tortelli, Massimo, and V. Fortini, identification of colza oil; its detection in olive oil and in other food oils, A., ii,

Totani, Ginzaburo, basic components of bamboo shoots, A., ii, 222.

Tóth, Julius, the cyanogen compounds of tobacco smoke, A., ii, 143, 1127. estimation of nicotine in concentrated tobacco juice, A., ii, 345.

Toth, Julius, and J. Krampera, comparative studies on the nicotine estimations in tobacco extracts, A., ii,

Touplain, F. See Fréd. Bordas. Tourpaïan, M. See Adrien Jaquerod. Towles, C. See Carl Voegtlin.

Townsend, John S., the charges on ions in gases and some effects that influence the motion of negative ions, A., ii, 355.

charges on ions in gases, A., ii, 686.

Traetta-Mosca, Filippo, and F. Apolloni, probable function of cholesterol in the production of uric acid in the animal organism, A., ii, 53.

Traetta-Mosca, Filippo, and Golda Mizzenmacher, importance of α-hydroxyisobutyric acid in the formation of uric acid from cholesterol by means of calf's liver, A., ii, 52.

Traube, Isidor, capillary analysis, A., ii, 328.

cohesion pressure. V., A., ii, 469.

Traube, Wilhelm, acyl derivatives of guanidine, A., i, 115.

autoxidation of aliphatic amino- and

polyhydroxyderivatives. II., A., i, 940.

oxidation of amino-acids by alloxan, isatin, and p-benzoquinone, A., i,

Traube, Wilhelm, and Alfred Engelhardt, alkylation of commercial cyanamide salts, A., i., 955.

Traube-Mengarini, Margherita, and Alberto Scala, colloidal solubility of metals in distilled water in presence of air and in a vacuum, A., ii, 116.

Trautmann, Woldemar, the analysis of ferro-uranium, A., ii, 157.

the analysis of ferro-zirconium, A., ii, 157.

analysis of molybdenite, A., ii, 230. estimation of silicon in vanadium and molybdenum and in their iron alloys, A., ii, 538.

analysis of ferro-vanadium and estimation of vanadium in the presence of arsenic, A., ii, 544.

analysis of ferro-titanium alloys rich in silicon, A., ii, 661.

estimation of tungsten in wolframite in the presence of molybdenite, A., ii, 1139.

Trautz, Max, temperature-coefficient of chemical reaction velocities. V. Reaction path and nascent state; the upper limit of chemical reaction-velocity and the temperature at which it is reached, A., ii, 381.

Treadwell, Frederick P. See Erich Müller.

Treadwell, W. D., the titration of potassium cyanide in presence of potassium ferrocyanide, A., ii, 827.

Trendelenburg, Paul, a proof of the presence of toxic substances in the blood of animals after thyroidectomy, A., ii, 50.

Treub, J. P. See Andreas Smits.

Trier, Georg, β-aminoethyl alcohol, a product of the hydrolysis of the lecithin of bean meal, A., i, 771.

Trier, Georg. See also Ernst Schulz.
Tritsch, Walter. See Roland Scholl.
Trivelli, Adriaan Peter Herman, constitution of photo-halides A ii 281

tution of photo-halides, A., ii, 281. Trivelli, Adriaan Peter Herman. See also Willem Paulinus Jorissen.

Tröger, [Karl] Julius [Ludwig], and H. Runne, Angostura alkaloids, A., i, 482. Trosianz, G., the excretion of subcutane-

ous injections of sodium chloride, and their effect on nitrogen metabolism, A., ii, 134.

Trotter, John Robert. See Martin Onslow Forster.

Tsakalotos, Demetrius E., basic properties of the oxygen of ethers, A., i, 514.

Tschebull, Erich. See Gustav Mossler.
Tscheishwili, P. A., catalytic properties of asbestos, A., ii, 43.

Tschelinzeff, Władimir W., principal properties of oxonium dibromides of simple ethers, A., i, 415.

Tschelinzeff, Wladimir W., and W. Konowaloff, influence of the medium on the formation of oxonium dibromides of simple ethers, A., i, 256. Tschelinzeff, Wladimir W., and W. Konowaloff, influence of the masses of the reacting substances on the formation of oxonium dibromides in different organic solvents, A., ii, 706.

influence of the concentration of the reacting substances on the formation of oxonium dibromides in different organic solvents, A., ii, 706.

Tschernoruzki, M., the enzymes of leucocytes, A., ii, 1108.

the action of nucleic acid on the fermentative processes in the animal body. A., ii, 1119.

body, A., ii, 1119.

Tschirch, [Wilhelm Oswald] Alexander, and H. Bromberger, Rhamnus cathartica bark, A., ii, 52.

Tschitschibabin, Alexei E., a convenient method for the reduction of alcohols of the diphenyl- and triphenylmethane series, A., i, 277.

dinaphthylmethanes and some of their

derivatives, A., i, 277.

methane, A., i, 278.

tri-a-naphthylmethane, A., i, 436. trinaphthylmethane compounds, A., i, 969.

Tschitschībabin, Alexei E., and I. V. Nikitin, 7-methoxy-3:4-dihydro-1:4benzopyrone, A., i, 1007.

Tschugaeff, Leo A., rotation dispersion.
III. Colourless compounds, A., ii,
450.

new type of abnormal rotation dispersion; contribution to optical superposition, A., ii, 787.

Tschugaeff, Leo A., B. P. Afanaséeff, I. Kiréeff, A. Postnikoff, and Iv. Tischtschenko, investigations on complex compounds. VII. Complexes of the dioxime series, A., i, 261.

Tschugaeff, Leo A., and W. Fomin, hydrogenation of isomeric thujenes and of sabinene thujane, A., i, 72.

and of sabinene thujane, A., i, 72. Tschugaeff, Leo A., and P. Koch, anomalous molecular refraction in the series of substituted glyoximes, A., ii, 829

Tschugaeff, Leo A., and G. Pigoulewsky, dithiocamphorearboxylic acid, A., i, 797.

Tschugaeff, Leo A., and E. Serbin, complex salts of certain amino-acids, A., i, 115.

Tsvett, M., so-called crystalline chlorophyll—a mixture, A., i, 74.

a new vegetable colouring matter: thujorhodin, A., i, 365.

the existence of two chlorophyllans, A., i, 395.

Tsvett, M., the solubility of the chlorophyllins and a new method for isolating them, A., i, 553.

mechanism of photosynthetic transformation of energy, A., ii, 451. a new colour reagent for callose, A.,

ii, 946.

Tubandt, Carl, Karl Mohs, W. Tubandt, and H. Weinhausen, inversion of menthone, A., ii, 28.

Tubandt, Carl, and W. Riedel, peroxides, A., ii, 987.

nickel peroxide and its behaviour in salt formation, A., ii, 987.

Tubandt, W. See Carl Tubandt.

Tučan, Fran., gajite, a new mineral, A., ii, 498.

Tucker, Samuel A., and Herbert R. Moody, the action of nitrogen on lithium carbide, A., ii, 883.

Tunmann, Otto, the alkaloids in Strychnos nux vomica during germinations, A., ii, 144.

the micro-chemistry of inulin, A., ii,

improvement of the micro-sublimation process and the detection of arbutin in plants, A., ii, 669.

micro-chemistry of plants. micro-chemistry of birch camphor, A., ii, 1022.

micro-chemistry of plants. II. Detection and localisation of andromedotoxin in Ericaceæ, A., ii, 1023.

Turner, (Miss) Emily Gertrude. James Kenner.

Turner, William Ernest Stephen, molecular association and its relationship to electrolytic dissociation; the molecular complexity of halogen-containing compounds, T., 880; P., 40.

Turner, William Ernest Stephen. See

also Cyril James Peddle.

Turrentine, John William, electro-chemistry of hydronitric acid [azo-imide] and its salts. I. Corrosion of William, some metals in sodium trinitride solution, A., ii, 693.

Tutin, Frank, the constituents of the bulb of Buphane disticha, T., 1240; P., 149. chemical examination of Enanthe crocata, A., ii, 921.

Tutin, Frank, and Hubert William Bentley Clewer, the constituents of rhubarb, T., 946; P., 89.

Tyrer, Dan, the volume of a solute in solution. Part II. The influences of molecular association, solvate formation and ionisation, T., 871; P., 96.

latent heats of vaporisation of mixed liquids, T., 1633; P., 215, 319.

Tyrer, Dan, a method for the accurate estimation of traces of water in ether, P., 142.

σ.

Uhlig, J., nephrite from the Harz, A., ii, 46.

Ulex, H., estimation of nicotine in concentrated tobacco juice, A., ii, 334.

Ullmann, Fritz, preparation of N-alkyland N-arylaryl-sulphaminoanthraquinones, A., i, 136.

preparation of nitrogen derivatives of

anthraquinones, A., i, 504.
Ullmann, Fritz, and Gerhard Billig, anthraquinone series. V. Dichloroanthraquinones, A., i, 490.

Ullmann, Fritz, Otto Fodor, and Masuo Sone, anthraquinone series, A., i, 466. Ullmann, Fritz, and Ernst Knecht, anthraquinone-thioxanthone, A., i,

Ullmann, Fritz, and Eduard Kopetschni, 3:5-dibromoanthranilic acid, A., i, 292.

Ullmann, Fritz, and Paul Ochsner, anthraquinone series. IV. Anthraquinone-1:2-acridone \mathbf{and} anthraquinonediacridone, A., i, 489.

Ulimann, Fritz, and Willem van der Schalk, anthraquinone-1-carboxylic acid, A., i, 165.

Ullmann, Fritz, and Alfred Schmid, action of bornyl chloride on aromatic amines, A., i, 70.

Ullmann, Fritz, and Masuo Sone, new synthesis of trihydroxythioxanthones, A., i, 739.

Ulrich, Christoph, fish, A., ii, 305.

Umnova, (Mlle.) A., action of hypochlorous acid on ethylene hydrocarbons, A., i, 249. Unanoff. See Michael Saytzeff.

Underhill, Frank Pell, the production of glycosuria by adrenaline in thy-

roidectomised dogs, A., ii, 137.
the metabolism of dogs with functionally-resected small intestine, A.,

influence of urethane in the production of glycosuria in rabbits after the intravenous injection of adrenaline, A., ii, 312.

carbohydrate metabolism. The influence of hydrazine on organism with special reference to the blood sugar content, A., ii, 910.

Underhill, Frank Pell, and Morris Seide Fine, carbohydrate metabolism. II. The prevention and inhibition of pancreatic diabetes, A., ii, 1001. Underhill, FrankPell. See also Yandell Henderson.

Ungemach, Henri, Mexican minerals, A., ii, 614.

atacamite, A., ii, 1100.
Upson, Fred W., action of normal barium hydroxide on dextrose and

galactose, A., i, 423.
Urazoff, G. G., electrical conductivity and hardness of magnesium-cadmium

alloys, A., ii, 887.

Urbain, Georges, a new element accompanying lutecium and scandium in gadolinite earths: celtium, A., ii, Ĭ15.

certain objections recently raised by A. Colson against the ionic theory, A., ii, 861.

Urbain, Georges, and C. Scal, monovariant systems admitting of a gaseous phase, A., ii, 370.

Urban, Josef. See Karl Andrlik.

Usher, Francis Lawry, and Joseph Hubert Priestley, mechanism of carbon assimilation. III., A., ii, 817.

Usher, Francis Lawry. See also Frank Playfair Burt.

Utzinger, Max. See Richard Willstätter.

V.

Valenta. See Robert Kremann. Vallette, F. See Alfred Guyot. Valeur, Amand. See Charles Moureu. Vandevelde, Albert Jacques Joseph, the

fractional precipitation of the milk

proteins, A., i, 91.

the systems: fat—alcohol, A., i, 515. the precipitation of proteins, A., ii, 630.

Vandevelde, Albert Jacques Joseph. also H. de Waele.

Vandormaele, Jos. See P. Hardy.

Vanin, Ivan, action of alkyl halides on anhydrides of monobasic acids in presence of magnesium and zinc, A., i, 416.

action of ethyl iodide and magnesium on menthone and carvone, A., i, 474.

Vanino, Ludwig, bismuth carbonate, A., ii, 806.

the action of acetic anhydride on uranium nitrate, A., ii, 898.

Vanino, Ludwig, and Paula Sachs, silver fluoride and silver subfluoride, A., ii, 884.

Vanino, Ludwig, and Emilie Zumbusch, bismuth, A., ii, 118. Bolognian stones. III., A., ii, 885.

Vanino, Ludwig, and Emilie Zumbusch, attempts to prepare bismuth hydride, A., ii, 1098.

Vanzetti, Bartolo Lino, diffusion [of dissolved substances], A., ii, 260. diffusion phenomena in [solutions] of

electrolytes, A., ii, 860. Vasilieff, Alexis M., uranyl salts. III.,

A., ii, 1096. Vassallo, Ettore, behaviour of organic and inorganic substances in vegetable organisms, A., ii, 522.

use of hæmatin in qualitative analysis and in the volumetric estimation

of bismuth, A., ii, 1139.

Vaubel, Wilhelm, the configuration of the benzene nucleus, A., i, 774.

a new method of preparing diazoamino-compounds, and a new rereaction for nitrous acid, A., i, 1049.

Vavon, Gustave, hydrogenation ٥f turpentine oil, A., i, 389. hydrogenation of limonene, A., i,

hydrogenation of carvone, A., i, 730. Vecchiotti, L. See Roberto Ciusa.

Veillon, R. See Gabriel Bertrand. Veit, Theo. See Edgar Wedekind.

Veley, Victor Herbert, the reactions between chemical compounds and living muscle-proteins, T., 180; P., 3.

Veley, Victor Herbert, and William Legge Symes, certain physical and physiological properties of stovaine and its homologues, A., ii, 516. Veley, Victor Herbert. See also William

Legge Symes.

Venturoli, Giuseppe, and Guido Tartarini Gallerani, chemico-toxicological study of adrenaline, A., ii, 635. Verbeek, P. See C. Purrmann.

Verda, A., estimation of volatile acids in wine, A., ii, 1037.

Vereinigte Chininfabriken Zimmer & Co., preparation of acyl derivatives of castor oil [ricinoleic acid], A., i, 107.

preparation of substituted carbamic acid esters, A., i, 118.

preparation of aloin derivatives, A., i,

preparation of acid esters of quinine halogen additive products, A., i,

Verhaeghe. See Ernest Gérard.

Vermorel, V., and E. Dantony, a colloidal copper soap as an anticryptogamic paste, A., ii, 647.

Vernadsky, Wladimir I., present-day problems concerning radium, A., ii, 359.

Vernadsky, ernadsky, Wladimir I., B. A. Lindener and (Mlle.) E. D. Revutsky, Wladimirdistribution of chemical elements in the earth's crust, A., ii, 1042.

Vernadsky, Wladimir I., and (Mlle.) E. D. Revutsky, chemical distinction between orthoclase and microcline, A., ii, 122.

Verneuil, Auguste, nature of the oxides causing the colours of oriental

sapphires, A., ii, 43.

Vernon, Horace Middleton, estimation of the indophenol oxydase of animal tissues, A., ii, 750.

the indophenol oxydase of mammalian and avian tissues, A., ii, 905.

Verschaffelt, Jules Emile, and (Mlle.) L. van der Noot, measurement of surface tension by the method of capillary rise, A., ii, 701.

Verzar, Fritz, the action of intravenous infusions of saline solutions on the respiratory exchanges, A., ii, 738. the metabolism of starch when intro-

duced parenterally, A., ii, 744. the resorption and excretion of starch

granules, A., ii, 744. the magnitude of the work of the liver, A., ii, 746.

is the activity of the liver indispensable for the combustion of sugar?

A., ii, 746. Vidal, J. See Charles Astre.

Viehöver, A. See E. Bierling. Vierhout, P., estimation of salicylic acid

in fruit juices, A., ii, 775.

Vieweg, Walter. See Hans Stobbe.

Vigneron, assay of cinchona bark; estimation of quinine and total alkaloids, A., ii, 234.

Vignon, Léo, formation of hydrocarbons from carbon monoxide, A., i, 101. action of water vapour on carbon in presence of lime, A., ii, 391.

Vigouroux, Emile, and A. Bourbon, alloys of nickel and zinc, A., ii, 1095.

Viguier, Paul, a-bromocrotonaldehyde, A., i, 178. tetrolaldehyde (Aa-butinal), A., i,

522. Vila, Antony. See P. Pipereaut. Vilikovsky, W. See B. Erben.

Ville, Jules, reduction of biliary pigments by the hydrogen evolved from palladium, hydrogenised in presence of sodium hypophosphite; formation of urobilinogen, A., i, 554.

Villiers, Antoine, regulator for diminished pressure with periodic alterations,

A., ii, 594.

Vinet, Émile. See Léon Moreau.

Violle, L. See Henri Labbé.

Virchow, C., estimation of lecithin, A., ii, 945.

Virck, Paul. See Otto Wallach.

Visco, Sabato, action of pancreatic lipase; contributions to the biology of the enzymes, A., ii, 809.

Vitali, Dioscoride, iodometric estimation of uric acid in urine, A., ii, 776.

Vitoux, estimation of lactose in milk, A., ii, 74.

Voegtlin, Carl, and C. Towles, creatinine metabolism, A., ii, 411.

Voelcker, John Augustus, pot-culture experiments, A., ii, 922.

Völtz, Wilhelm, and August Baudrexel. the influence of meat-extractives on the absorption of nutritive material; the physiological value of meat extract, A., ii, 214.

the utilisation of yeast in the human

body, A., ii, 215, 304.

the amount of alcohol excreted by the animal organism under various con-

ditions, A., ii, 218.

the amount of alcohol excreted by the animal organism under various conditions. II. Influence of muscular work on the excretion of alcohol in expired air and urine, A., ii,

Voge, Adolph Law, isomeric inorganic compounds, A., ii, 977.

Vogel, M. See Rudolf Weissgerber. Vogel, Rudolf, cerium-tin alloys, A., ii, 1090.

Vogt, Thorolf, yttrofluorite, a new mineral from Norway, A., ii, 733.

Vogt, Wilhelm. See Karl Fries.

Voigt, J., are starch granules excreted by the kidneys? A., ii, 1116.

Voigt, Woldemar, and Statescu, alterations in the concentration of the solution of a magnetisable salt in a non-homogeneous magnetic field, A., ii, 578.

Voisenet, E., a ferment causing bitterness in wines, acting as a dehydrating agent towards glycerol, A., ii, 915.

the disease causing bitterness in wines in connexion with the acrylic fermentation of glycerol, A., ii, 1127.

Volchonsky, E., solutions from the point of view of general dynamics. I., A., ii, 23.

equilibrium between two substances in a mixed binary solution. VIII., A., ii, 25.

Voldere, Georges de, the scientific foundations of the systematic separation of combustible gases, A., ii, 329.

See Eberhard Rimbach. Volk, H.

Volk, W. See Karl Fries.

Vongerichten, Edouard, and W. Rotta, quinaldinium bases, A., i, 676.

Voorhoeve, N., calcium metabolism. A new method for the quantitative estimation of small variations of the calcium content of the blood, A., ii, 126.

calcium metabolism. II. The calcium content of human blood after oral administration of large doses of calcium, A., ii, 622.

Vorbrodt, Wlad., investigations of the phosphorous compounds of seeds, par-

ticularly phytin, A., i, 263.
Vorländer, Daniel, A. Friedberg, Ch. van der Merve, L. Rosenthal, M. E. Huth, and M. von Bodecker, new reactions of cyanogen and acyl cyanides, A., i, 865.

Vorländer, Daniel, and M. E. Huth, character of the double refraction of

liquid crystals, A., ii, 165. Voroschtsoff, N. N., the stability towards light of methylated hydroxyazodyes; some derivatives of 1-meth-

oxynaphthalene, A., i, 340. new synthesis of o-hydroxyazobenz-

ene, A., i, 818.

bisulphite compounds of hydroxyazocolouring matters, A., i, 819.

Voswinkel, Arnold, preparation of saltlike compounds from toluenesul-phonamides and 1-phenyl- or 1-ptolyl-2:3-dimethyl-5-pyrazolone, A., i, 498.

preparation of stable bromo- and iododerivatives of fats free from sul-

phur, A., i, 601.

Votoček, Emil, nomenclature of the sugars, A., i, 179.
isorhodeose, A., i, 354.
Votoček, Emil, and Cyrill Krauz, epi-

rhodeose, A., i, 179.

Vournasos, Alexander Ch., decomposition of sodium chloride, A., ii, 392.

some definite bismuthides, A., ii,

preparation of certain nitrides by reduction of alkaline cyanides, A., ii,

Voznesensky, S. See Nicolai M. Kijner. Vrevsky, M. S., composition and vapour pressure of solutions. IV. Change in composition of mixtures of constant boiling point, A., ii, 256.

Vuafart, L., detection and estimation of cyanamide in the presence of other

fertilisers, A., ii, 776.

Waals, Johannes Diderik van der, the value of the critical quantities, A., ii, 583.

the value of the volumes of the coexisting phases of a simple substance, A., ii, 584.

Wachsmuth, Franz. See Emil Abderhalden.

Wacker, Alexander. See Otto Wallach. Wacker, Leonhard, colorimetric method of determining the molecular size of polysaccharides, A., i, 355.

Wada, Toyotane, the removal of the poisonous properties of stryclinine and cocaine by peripheral nerves, A., ii,

315.

Wade, John, and Richard William Merriman, apparatus for the maintenance of constant pressures above and below the atmospheric pressure; application to fractional distillation, T., 984; P., 64.

influence of water on the boiling point of ethyl alcohol at pressures above and below the atmospheric pressure,

T., 997; P., 65.

Waele, H. de, and Albert Jacques Joseph Vandevelde, the fate of injected foreign proteins and peptones, A., ii, 128.

Waentig, Percy, and Otto Steche, enzymic decomposition of hydrogen peroxide, A., i, 759.

Wagenaar, M., estimation of glycerol, A., ii, 663.

titration of phosphoric acid, A., ii, 931.

Wagner, Carl L., velocity of crystallisation and dissolution, A., ii, 265.

Wagner, Ernst, regularities in the changes of the electrical conductivity of metals on liquefaction, A., ii, 177.

Wagner, Franz L., the ultra-violet spark spectrum of air, A., ii, 829.

Wagner, Paul, calcium of sodium nitrate [as manure], A., ii, 65.
Wagner, Richard. See Hans Handovsky.

Wahl, André [R.], condensation of ethyl acetate with its higher homologues, A., i, 108.

Wahl, André, and P. Bagard, constitution of indirubin, A., i, 577.

Wahl, Emil. See Hans Stobbe.

Wahl, Walter Andre, meteorites, A., ii, 47.

Wahlberg, Erik, ethyl tert.-valerylacetate, A., i, 707.

Wahlberg, Erik. See also Oskar Widman.

Wainoff, J. See Alfred Benrath.

Waitz, Paul, position of the substituents in a-resodicarboxylic acid, A., i, 541.

Wakeman, Alfred John, and Henry Drysdale Dakin, katabolism phenylalanine, tyrosine, and of their derivatives, A., ii, 416.

relationship between urea and common salts, A., ii, 629.

Wakeman, Alfred John. See also Henry Drysdale Dakin.

Walbinger, P. See Alexander Gutbier. Walden, A. E. See George Druce Lander. Walden, Paul, some abnormal tempera-

ture-coefficients of the molecular surface energy of organic substances, A., ii, 97.

history of colloidal silicic acid, A., ii, 1086.

Walden, Percy Talbot. See Harry Ward Foote.

Waldmüller. Martin. See Wilhelm Wislicenus.

Waldschmidt, W. See P. von Grützner. Nicolai A., absorption Waliaschko, spectra and the constitution of benzene derivatives. II., A., ii, 2.

Walker, (Miss) Maggie. See Holland Crompton.

Walker, Percy Hargraves, and H. A. Whitman, rapid analysis of Babbitt

metal, A., ii, 442. Walker, W. O., and J. A. MacRae, estimation of halogens in organic com-

pounds, A., ii, 434. Wallace, Robert C., crystallographic (isomorphous) relations of indium and

thallium, A., ii, 890.

Wallach, Otto, terpenes and ethereal oils. CVII. Constitution and synthesis of pinolone and of dihydropinolone (3acetylisopropylcyclopentane), A., i,

Wallach, Otto, Frederick Challenger, Erwin Meyer, Friedrich Pohle, and Friedrich Ritter, terpenes and ethereal CV. Reduction of alicyclic com-

pounds, A., i, 469.
Wallach, Otto, Friedrich Henjes, and Paul Virck, terpenes and ethereal oils,

CIV., A., i, 312.

Wallach, Otto, Ludwig Oldenberg, Friedrich Ritter, and H. Wienhaus, terpenes and ethereal oils. CIII. Studies in the fenchone series, A., i, 310.

Wallach, Otto, Walter Ost, Friedrich Pauly, and Alexander Wacker, ter-penes and ethereal oils. CVI. Dicyclic compounds from cyclohexanone, A., i, 473.

Wallach, Otto. See also Walter Norman Haworth.

Waller, Augustus Désiré, comparative effects of yohimbine, protoveratrine, and veratrine on isolated muscle and

nerve, A., ii, 138.
Wallis, Robert Lauder Mackenzie, and Harold Alfred Schölberg, chylous and pseudo-chylous ascites, A., ii, 512.

Wallis, Robert Lauder Mackenzie. See also Harold Alfred Schölberg.

Walpole, George Stanley, action of Bacillus lactis aërogenes on dextrose and mannitol. II. Investigation of the $\beta\gamma$ -butanediol and the acetylmethylcarbinol formed; effect of free oxygen on their production; action of B. lactis aërogenes on lævulose, A., ii, 318.

direct estimation of creatine in pathological urine, A., ii, 671.

Walpole, George Stanley. See also A. T. Glenny.

Walsh, (Miss) Gertrude Maud. See Victor John Harding.

Walter, Bernhard [Ludwig Johann Heinrich], the ratio of argon to nitrogen in gases from springs, A., ii, 280.

Walter, Friedrich. See August Michaelis. Walter, Johann, the reaction of cellulose nitrate with dimethylaniline, A., i,

colorations produced by the interaction of aromatic amino- and nitro-com-

pounds, A., i, 363.

Walter, O., T. Krasnoselskaya, N.

Maksimoff, and W. Malschewsky,
content and distribution of hydrogen cyanide in the bamboo, A., ii, 525.

Walter, Wilhelm. See Hermann Pauly. Walther, Reinhold von, P. Herschel, and H. Litter, condensation of esters of alkyloxy-acids with cyanides and ketones, A., i, 237. Walton, James Henri, jun., crystallisa-

tion through membranes, A., ii, 194. tap for hydrogen sulphide appara-

tus, A., ii, 975. method of filling reagent bottles, A., ii, 976.

Walton, James Henri, jun., and Roy C. Judd, equilibrium in the system: lead nitrate and pyridine, A., ii,

Warburg, Emil, the transformation of energy in photochemical reactions in gases, A., ii, 834.

Warburg, Otto, the influence of oxidation in living cells according to researches on the red corpuscles, A., ii, 49.

[poisonous action of sodium chloride on sea-urchin's eggs], A., ii, 60.

Warburg, Otto, the influence of oxygen breathing, A., ii, 211.

the influence of breathing oxygen. II. Relationship to constitution, A., ii,

Warburg, Otto. See also Otto Neubauer.

Warcollier, G., estimation of tartaric acid in apples, pears, cider, and perry, A., ii<u>,</u> 1038.

Ward, P. G., action of various salts on isolated muscle. I. Sodium, potassium, and ammonium salts, A., ii.,

Warren, Charles Hyde. See Charles Palache.

Warren, R. D. See Gregory Paul Baxter.

Warren, William Homer, "sugar sand" from maple soap; source of malic acid, A., ii, 821.

detection of gas in sealed-tube re-

actions, A., ii, 925.
Wartenberg, H. von, the ultra violet absorption of oxygen, A., ii, 1. crystalline liquids, A., ii, 952.

Wartenberg, H. von. See also Ebenezer H. Archibald and O. J. Stafford.

Warth, C. See Georg Erlwein. Warunis, Theodor St., action of phenylthiocarbimide on mono- and di-isoamylaniline, A., i, 38.

estimation of sulphur in organic com-

pounds, A., ii, 67. estimation of total sulphur in coals, A., ii, 436. estimation of halogens in organic

compounds, A., ii, 927.

Washburn, Edward W., the laws of "concentrated" solutions. II. The estimation of the degree of ionisation of electrolytes in moderately con-

centrated solutions, A., ii, 862.

Washburn, Edward W., and Duncan A. MacInnes, cæsium nitrate and the law of mass action, A., ii,

laws of "concentrated" solutions. III. Ionisation and hydration relations of electrolytes in aqueous solution at 0°: (A) cæsium nitrate, and lithium potassium chloride, chloride, A., ii, 1076.

Wasteneys, Hardolph. See Jacques Loeb.

Watanabe, Matajiro, the constituents of Scopolia japonica, A., ii, 427.

Waterman, N., [physiological action of] pilocarpine, A., ii, 220, 636.

adrenaline immunity, A., ii, 1016. Waters, Campbell Easter, convenient potash bulb, A., ii, 153.

Watson, Edwin Roy, aminoquercetin; preliminary note, P., 163.

Watsoe, Edwin Roy, and Jatindra M. Dutta, relation between chemical constitution and fastness to light and other agencies of polyhydroxybenzo-phenone dyes, A., i., 305.

Watson, G. N., a delicate test for acet-

anilide, A., ii, 777.

Watson, Herbert Edmeston, a method for the accurate volumetric determination of the oxygen in air, T., 1460; P., 135.

regularities in the spectrum of neon, A., ii, 559.

Watson, William, isopiestic expansibility of water at high pressures and temperatures, A. ii, 793.

Watts, O. P., and C. E. Mendenhall, the melting of carbon, A., ii, 831.

Wdowiszewski, Henrik, and P. Bogoluboff, estimation of chromium in chrome-tungsten steel, A., ii, 157.

Weber, Rudolf H., magnetisability of the salts of metals of the iron group, A., ii, 1057.

Webster, Arthur. See Benjamin Moore. Wechsler, Elkan, the technique of the phosphotungstic acid precipitation, A., iı, 828.

Wecker, Ernst. See Heinrich Wieland. Wedekind, Edyar [Leon Waldemar Otto], a group of synthetic organic colloids, A., i, 684.

behaviour of zirconium oxide towards hydrofluoric acid, A., ii, 774.

Wedekind, Edgar, Johannes Häussermann, Moriz Miller, and W. Weisswange, pyronone synthesis by means of the "tertiary bases reaction." II., A., i, 219.

Wedekind, Edgar, and W. Maass, pre-paration of tantalic acid from West Australian fergusonite; sodium tan-

talate, A., ii, 44.

Wedekind, Edgar, and F. Paschke, cryoscopic behaviour of quaternary aromatic ammonium salts in bromoform, and the cryoscopic measurement of a velocity of decomposition, A., ii, 1060.

Wedekind, Edgar, F. Paschke, and W. Mayer, the influence of the medium and of light on the rate of decomposition of quaternary ammonium salts, A., i, 628.

Wedekind, Edgar, and Daniel Schenk, action of strong tertiary bases on sulphonyl chlorides, A., i, 190.

Wedekind, Edgar, Theo. Veit, and K. Fetzer, further ferromagnetic compounds of manganese, A., ii, 985.

Wegelin, Gustav. See Erich Müller.

Wegelius, Henrik, method for determining the uniformity or the phasenumber of a substance; application to silver mercuric iodide, A., ii, 883.

Wegener, Alfred, the nature of the uppermost layers of the atmosphere,

A., ii, 271, 387.

Wegscheider, Rudolf [Franz Johann], a-phenyltricarballylic acid, A., i, 458; sublimation of ammonium chloride, A., ii, 16.

AlfonsWegscheider, Rudolf, and Klemenc, derivatives of nitrohemipinic

acid, A., i, 541.

Wegscheider, Rudolf, Heinrich Felix Perndanner, and Otto Auspitzer, esterification of unsymmetrical di- and poly-basic acids. XXIII. Trimellitic acid, A., i, 130.

Wegscheider, Rudolf, and Ernst Späth, derivatives of aldol and croton-

aldehyde, A., i, 112.

Wehrle, E., the functions of the liver, A., ii, 812.

Weichardt, Wolfgang, protein cleavage products in expired air, A., ii, 993. Weickel, Tobias. See Wilhelm Schlenk. Weidenhaupt, O. See Max Siegfried.

Weidig, M., radioactive springs of exceptionally high activity at Brambach in the Saxon Vogtland, A., ii, 686.

Weigert, Fritz, the grouping of photo-

chemical reactions, A., ii, 834. Weil, Arthur. See Emil Abderhalden. Weil, Edmund, anti-agglutination by extracts of bacteria, A., ii, 619.

Weil, Edmund, and Wilhelm Spät, the mechanism of the complement deviation in the case of antiprotein sera, A., ii, 618.

Weil, H., a new reagent for nickel and cobalt and its use for distinguishing between these metals, A., ii, 158.

Weil, Hugo, Karl Dürrschnabel, and Paul Landauer, action of sulphurous acid and of sulphites on various dyes, A., i, 1006.

Weil, Hugo, and Walter Heerdt, action of sodium amalgam on naphtholearb-

oxylic acids, A., i, 978.

Weiller, Paul, lead silicates, A., ii, 983.
Weimarn, P. P. von, theory of the phenomena of transition between colloidal and true solutions, A., ii, 102

methods of investigation of capillary chemical problems, A., ii, 259.

the "precipitation coefficient," A., ii, 261.

Weimarn, P. P. von, the degree of dispersity and its influence on the chemical composition and the firmness of the combination of water of hydration, A., ii, 377.

nature of disperse systems, A., ii,

gelatinisation- and hydration-capacity, A., ii, 866.

Weinhausen, H. See Carl Tubandt. Weinheber, M. See Arthur Rosen-

heim.

Weinland, Rudolf Friedrich, Karl Hoelin, and M. Fiederer, salts of a green and of a violet propionatochromium base, A., i, 104.

Weinschenk, Ernst, and H. Steinmetz, a new type of moldavite, A., ii, 501.

Weintroube, Jacob. See Martin Onslow Forster.

Weir, John, new derivatives of aminolauronic acid, T., 1270; P., 154.

Weisburg, Julius, estimation of calcium oxide in sugar refinery products, A., ii, 659.

Weiss, Fritz, salts of arginine, A., i, 667.

Weiss, J. See Johann Georg Koenigsberger.

Weiss, Pierre, a new property of the magnetic molecule, A., ii, 91.

rationality of the ratios of the magnetic moments of atoms and a new universal constituent of matter, A., ii, 183.

value of magneton, deduced from the coefficients of magnetisation of solutions of iron salts, A., ii, 250.

magneton in solid paramagnetic substances, A., ii, 367.
rationality of the proportions of the

molecular magnetic moments and the magneton, A., ii, 694.

Weiss, Pierre, and G. Foëx, the magnetisation of ferro-magnetic substances above the Curie point, A., ii, 183, 250.

Weiss, Pierre, and Heike Kamerlingh Onnes, magnetisation at very low temperatures, A., ii, 15.

Weisse, Gottfried von. See Paul Dutoit. Weissgerber, Rudolf, indole in coal tar, A., i, 155.

benzylindene, A., i, 713. Weissgerber, Rudolf, P. Brehme, A. Dombrowsky, F. Kraft, and M. Vogel, indene series, A., i, 623.

Weisswange, W. See Edgar Wedekind.

Weisweiller, GabrielGustave. See Bertrand.

Weisz, Moriz, the relation of the precursors of the normal yellow pigment of urine to the diazo-reaction, and a colorimetric estimation of urochrome and urochromogen, A., ii, 136.

Weitbrecht, W., the sensitiveness of certain reactions for blood, and their use in the analysis of urine, A., ii,

Weizmann, Charles. See Roman Alpern. Victor John Harding, and Arthur Hopwood.

Welde, Ernst. See Theodor Curtius and F. Edelstein.

Wellisch, E. M., phenomena which accompany the transport of the active deposit, A., ii, 358.

Wells, Roger Clark, sensitiveness of the colorimetric estimation of titanium, A., ii, 444.

Wells, Roger Clark. See also Frank Lee Hess.

Welsbach, Carl Auer von, chemical investigation of actinium-containing residues of radium extraction. I., A., ii, 7.

elements in thulium, A., ii, 607.

Welsh, David Arthur, positive and negative phases of blood-coagulation in man, A., ii, 618.

Welsh, David Arthur, and H. G. Chap-

man, the interpretation of the pre-

cipitin reaction, A., ii, 809.

Welsh, T. W. B. See Arthur Wesley Browne.

Welt, H. See J. Hudig.

Welter, Adolf, reversibility of enzyme action, A., i, 409.

Wender, Neumann, the influence of inactive substances on the rotation of lævulose, A., i, 114.

Wendt, Georg von, the influence of the climate of high altitudes on the metabolism of man, A., ii, 506.

Wennmann, D. A. apparatus for the estimation of sulphur [in iron or steel], A., ii, 653, 938.

new apparatus for the estimation of sulphur and carbon in iron and steel, A., ii, 1026.

Wentzki, O., theory of the lead chamber process, A., ii, 273.

the reduction of nitrosylsulphuric acid by mercury, A., ii, 878.

Wenzel, Franz. See Josef Herzig.

Werkhowsky, W. See Wladimir N. Ipatieff.

Werner, Alfred, spatial change of position during reactions of stereoisomeric compounds, A., i, 424.

the asymmetric cobalt atom. II., A., i, 838.

Werner, Altred, mirror image isomerism with chromium compounds. I., A., i, 951.

Werner, Alfred, V. L. King, and E. Scholze, the asymmetric cobalt atom. I., A., i, 613.

Werschinin, N., action of barium ions on the heart, A., ii, 1117.

Wertenstein, Louis, a readily absorbable ionising radiation emitted by radium-C, A., ii, 684.

West, Augustus Price, and Harry Clary conductivity, dissociation, and temperature-coefficients of conductivity at 35°, 50°, and 65° of aqueous solutions of a number of

salts. XIV., A., ii, 10. West, C. J. See Lee Holt Cone and

Moses Gomberg.

Westhausser, F., protein estimation and peptic digestion of protein, A., ii, 674.

Šee also August Westhausser, F. Morgen.

Westhoff, F. See Hermann Ost.

Weston, Frank Edwin, and Henry Russell Ellis, thermic reactions in a vacuum. I., II. and III., A., ii, 398. Westphal, W. See J. Franck.

Weszelszky, Julius von, a new apparatus for radioactive measurements, A., ii,

Weyberg, Zygmunt, crystallisation, dissolution, and regeneration polyhedra of potassium and ammonium-aluminium alums in aqueous solutions containing hydrochloric and nitric acid, A., ii, 263.

Weydert, L. See Paul Bary.

Wheeler, Alvin Sawyer. See Helmuth Scheibler.

Wheeler, Henry Lord, and Charles Andrew Brautlecht, hydantoins. Aldehyde condensation products of phenylthiohydantoins, A., i, 500.

Wheeler, Henry Lord, Charles Andrew Brautlecht, and Charles Hoffman, iodine derivatives of toluene, A., i, 27.

Wheeler, Henry Lord, and Charles Hoffman, aminomethylbenzoic acids [aminotoluic acids], A., i, 50.

alkylation of aromatic amino-acids. V. 3-Amino-2:4-dimethylbenzoic acid, A., i, 446.

hydantoins; synthesis of phenylalanine and of tyrosine. I., A., i, 498. Wheeler, Henry Lord, Charles Hoff-

man, and Treat Baldwin Johnson, hydantoins. V. Synthesis of 3:5-dichlorotyrosine, A., i, 923.

Wheeler, Henry Lord, and Treat Baldwin Johnson, Pechmann's isomeric hydrazidines, A., i, 166.

Wheeler, Henry Lord, and Lafayette Benedict Mendel, iodoproteins, A., i, 97.

Wheeler, Henry Lord, Ben H. Nicolet, and Treat Baldwin Johnson, hydantoins. VI. Action of acylthioncarbamates, acylthiocarbamates, acyldithiocarbamates, and acylimidodithiocarbonates on a-amino-acids; 2-thiolhydantoin, A., i, 1031.

Wheeler, Richard Vernon. See Maurice John Burgess and Thomas Fred Eric

Wheldale, (Miss) Muriel, chemical differentiation of species, A., ii, 760. direct guaiacum reaction given by plant extracts, A., ii, 818.

Whiddington, R., the production of characteristic Rontgen radiations, A,

ii, 568.

Whipple, George C., and Melville C. Whipple, solubility of oxygen in seawater, A., ii, 271.

Whipple, Melville C. See George C.

Whipple.

White, Albert Simpson. See Frederick George Donnan.

White, George Frederic. See Eugene C. Bingham and Donald D. van Slyke.

Whitfeild, Bernard Wyndham. Samuel Shrowder Pickles.

Whitman, H. A. See Percy Hargraves

Whytlaw-Gray, Robert, and (Sir) William Ramsay, the density of niton (radium emanation) and the disintegration theory, A., ii, 173.

Wibaut, J. P. See Arnold Frederik

Holleman

Wichers, J. Louis, and Bernhard Tollens, the pentosan content of various fungi, A., ii, 63.

Wichers, L. See Siegfried Seydel.

Wichmann, Alexis, simplified method for the estimation of the acid and saponification numbers of waxes, A., ii,

Widman, Oskar, and Erik Wahlberg, cyanopinacolin and some compounds

derived from it, A., i, 702.

Widmark, Erik Matteo Prochet, the chemical conditions necessary for the normal maintenance of the structure. I. and II., A., ii, 56.

Widmer, Robert. See Adolf Kaufmann. emulsion Wiegner, Georg, (emulsoids) and observations on the methods of counting ultra-micro-scopic particles, A., ii, 194.

ultra microscopic investigations certain colloids coagulated by elec-

trolytes, A., ii, 591.

Wiegner, Georg, and Frerik Burmeister, the adsorption of sugar in aqueous solution, A., ii, 259.

Wieland, Heinrich, formation of fulminic acid from alcohol, A., i, 23.

Wieland, Heinrich, triphenylmethyl peroxide; the chemistry of free radicles, A., i, 851.

Wieland, Heinrich, and Huns Fressel, experiments on the preparation of derivatives of hydroxyhydrazines, A., i, 495.

Wieland, Heinrich, and Paul Kappelmeier, morphine. I., A., i, 743.

Wieland, Heinrich, and Hans Lecher, aromatic hydrazines. IX. phenylhydrazine andhexaphenylethane, A., i, 569.

Wieland, Heinrich, and A. Roseeu, the stability of the nitrogen linking in

ketazines, A., i, 571.

Wieland, Heinrich, and Arthur Süsser, aromatic hydrazines. X. phenylhydrazine, A., i, 570. Tetradi-

Wieland, Heinrich, and Ernst Wecker, aromatic hydrazines. VIII. Oxidation of diphenylhydrazine, A., i, 82.

Wieland, Heinrich. See also Kurt H. Meyer.

Wiener, Hugo, density of ammonium sulphate solutions, A., ii, 394.

estimations of globulin by means of ammonium sulphate, and the preparation of pure globulins, A., ii, 1144.

Wiener, Karl. See Efim Semen London. Wiener, Otto, the theory of refraction

constants, A., ii, 557.
Wienhaus, H. See Otto Wallach.
Wiesemann, C. See Adolf Beythien.

Wiesner, Franz. See Leo von Lieber-

Wigand, Albert, reversible light reaction of sulphur, A., ii, 878, 1084.

Wigdorow, S. See Gustav Jantsch.

Wightman, E. P., and Harry Clary Jones, conductivity and dissociation of organic acids in aqueous solution between 0° and 35°, A., ii, 689.

Wilenko, G. G., the action of intravenous injections of concentrated solutions of sugar and salt, A., ii, 1015.

Wilenko, G. G. See also H. Schiro-Kauer.

Wilhelmi, Arthur, exact gas analysis, A., ii, 652.

Wilkie, John Matthew, the action of iodine on phenols and its application to their volumetric estimation. Phenol, salicylic acid, \(\beta\)-naphthol, A., ii, 546.

a sensitive test for the detection of phenol and salicylic acid, A., ii, 547.

Wilks, William Arthur Reginald, the absorption of the halogens by dry slaked lime, P., 308.

Wilks, William Arthur Reginald. See also Henry John Horstman Fenton.

Willgerodt, Carl, and Rudolph Schloss, o- and m-iodo-p-tolyl methyl ether and derivatives with multivalent iodine, A., i, 715.

Willgerodt, Conrad, and Bruno Albert, acylated phenanthrenes and some of their derivatives, A., i, 882.

Williamson, George Scott. See Isaac Walker Hall.

Wills, F., and Philip Bouvier Hawk. effects of copious water drinking with meals on gastric secretion, A., ii, 214.

Willstätter, Richard [Martin], and Alessandro Brossa, aß-dimethyl-lævulic acid, A., i, 707.

Willstätter, Richard, and Carl Cramer, quinonoid compounds. XXIV. and Aniline-black, XXV. A., i, 90, 736.

Willstätter, Richard, and Ernst Hug, chlorophyll. XV. Iso'ation of chlorophyll, A., i, 393.

Willstätter, Richard, and Max Isler, chlorophyll. XIV. Comparative experiments with chlorophyll fromdifferent plants. III., A., i, 392. Willstätter, Richard, Erwin IV. Mayer,

and Ernst Huni, chlorophyll.

Phytol. I., A., i, 144.
Willstätter, Richard, and Fritz Müller, quinonoid compounds. XXVI.
o-quinones, A., i, 728.
Willstätter, Richard, and Hans Eduard

quinonoid compounds. XXVII. Chloro-derivatives of catechol and of o-benzoquinone, A., i, 729

Willstätter, Richard, and Alfred Oppé, X. Comparative inchlorophyll. vestigation of chlorophyll from different plants. II., A., i, 140.

Willstätter, Richard, and Arthur Stoll, chlorophyll. XI. Chlorophyllase, A., i, 141, 172.

XIII. Decomposition chlorophyll. and formation of chlorophyll, A., i,

Willstätter, Richard, and Max Utzinger, chlorophyll. XVI. The primary decompositions of chlorophyll, A., i, 659.

Wilm, Alfred, aluminium alloys containing magnesium, A., ii, 493.

Wilsdon, Bernard Howell. See Frederick

Daniel Chattaway and Nevil Vincent Sidgwick.

Wilson, Charles Thomson Rees, a method of making visible the paths of ionising particles through a gas, A., ii, 565.

Wilson, Forsyth James, and Alfred Archibald Boon, the elimination of bromine from phenyl p-methoxystyryl ketone dibromide, P., 197.

Wilson, Forsyth James. See also Isidor

Morris Heilbron.

Wilson, Frederick P., biochemical relations of various lipoid substances in the liver, A., ii, 1111.

Wilson, G. Hawwell. See Carl Hamilton Browning.

Wilson, Harold A, the velocity of the ions of alkali salt vapours in flames, A., ii, 572.

the number of electrons in the atom, A., ii, 593.

Wilson, Roger. See James B. Garner.

Wilson, W., the variation of ionisation with velocity for the β -particles, A., ii, 566.

Wimmer, W., how far can protein catabolism in inanition be diminished by feeding on carbohydrates? A., ii, 1003.

Windaus, Adolf, colchicine. I. and II., A., i, 904.

Windaus, Adolf, and J. Adamla, cholesterol. XIII. Cholesterylamine, A.,

Windaus, Adolf, and H. Opitz, synthesis of iminazole [glyoxaline] derivatives, A., i, 752.

Windisch, Karl, and Theodor Roettgen, estimation of volatile acids in wine, A., ii, 942.

Winkler, Ludwig W., estimation of dissolved oxygen, A., ii, 329, 532. estimation of the saponification numler, A., ii, 550.

Winninghoff, W. J. SeeWilliamCrowell Bray.

Winograd-Finkel, Mariam. See Erich Beschke.

Winston, L. G., electrical induction in

chemical reactions, A., ii, 692.
Winston, L. G., and Harry Clary Jones, conductivity, temperature-coefficients of conductivity, and dissociation of certain electrolytes in aqueous solution from 0° to 35°; probable inductive action in solution and evidence for the complexity of the ion, A., ii, 961.

Winterberg, Heinrich. See C. J. Rothberger.

Winternitz, M. C. See Samuel Amberg. Winterstein, Hans, the regulation of breathing by the blood, A., ii, 211.

Winther, Chr., optical sensitisation, A., ii, 239.

the theory of colour sensitiveness, A., ii, 239.

Wirth, Joseph, the degradation of carbohydrates in the liver, A., ii, 629.

Wirth, P. H., cherry-laurel water and solutions of benzaldehyde and hydrocyanic acid in water, A., i, 875.

Wise, Louis Elsberg. See Marston Tay-

lor Bogert.

Wislicenus, Wilhelm, ester condensations with chloroacetic ester, A., i, 107.

Wislicenus, Wilhelm, and Alexander Ruthing, desmotropism of formyldeoxybenzoin, A., i, 303.

Wislicenus, Wilhelm, and Martin Waldmüller, ethyl oxalylsuccinate, A., i, 603.

Wislicenus, Wilhelm, and Margarita von Wrangell, ethyl formylglutaconate

and its isomerides, A., i, 521. Wisloki, Waslaw. See Herman Decker. Withers, John Charles. See Martin Onslow Forster.

Withers, William Alphonso, and Burton Justice Ray, modification of the diphenylamine test for nitrous and nitric acids, A., ii, 656. Withrow, James Renwick. See Josiah

Simpson Hughes.

Wituynj, J., amounts of chlorine and sulphuric acid in rain-water, A., ii,

Witzemann, Edgar John. See William L. Evans.

Wöhler, Lothar, solid solutions in the dissociation oxides, A., ii, 259.

Wöhler, Lothar, and Walther Becker, Guignet's green, A., ii, 401.

Wöhler, Lothar, and W. Frey, estimation of the acidity of hydrogen peroxide, A., ii, 149.

Wöhler, Lothar, and A. Spengel, separation of platinum and tin, A., ii, 338.

Woelfel, A. See Anton Julius Carlson. Wölz, Ewald. See Hugo Bauer.

Wohl, Alfred, and Franz Koch, sulphanilide, A., i, 36.

Wohl, Alfred, and Rudolf Maag, preparation of aldehyde diacetates, A., i,

synthetical experiments in the cin-

choleupone series, A., i, 24.

Wohl, Alfred, and E. Nagelschmidt, ester-acids and amido-acids of the isophthalic acid series; the question of equivalence of positions 2 and 6 in the benzene nucleus, A., i, 57.

Wohlgemuth, Julius, chemical changes in phosphorus livers, A., ii, 517.

IX. The influence of the diastases. serum, lymph, and the expressed juice of organs on diastatic action, A., ii 743.

Woitaschewsky, A., dependence of the integral heat of solution on the temperature, A., ii, 1066.

Wolf, Charles George Lewis, and Emil Österberg, estimation of sulphur and phosphorus, A., ii, 67.

protein metabolism in phloridzin diabetes, A., ii, 512.

protein metabolism in the dog, A., ii, 1003.

Wolf, Max. See Franz Fischer.

Wolff, Albert, preparation of dialkylethylenedibarbituric acids, A., i, 690. Wolff, E. See Richard Lorenz.

Wolff, Hermann, volume changes in the formation of solutions, A., ii, 968.

Wolff, Jules, reduction of oxyhæmoglobin, A., i, 590.

Wolff, Jules, and Eloi de Stæcklin, new method for the preparation of a calalase from blood and its properties, A., i, 412.

the specific action of different com-pounds of iron from the point of view of their action as peroxydases, A., ii, 795.

Wolff, Jules. See also Auguste Fernbach. Wolff, Salomon. See Arthur Green and Carl Gustav Schwalbe.

Wolfsleben, Kurt. See Richard Meyer. Wollman, (Mmc.) E. See Jacques Duclaux.

Wolodkowitsch, G. von. See Roland Scholl.

Wolter, Peter, the ultra-violet bands of the carbon monoxide spectrum, A., ii,

Woltereck, Herman Charles, production of ammonia and the economy of nitro-

gen with peat, A., ii, 598.

Wood, Joseph Turney, Henry Julius Salomon Sand, and Douglas John Law, employment of the electrometric method for the estimation of the acidity of II., A., ii, 942. tan liquors.

Wood, Robert Williams, the resonance

spectra of iodine, A., ii, 82. the destruction of the fluorescence of iodine and bromine vapour by other gases, A., ii, 169.

the resonance spectra of iodine vapour and their destruction by gases of

the helium group, A., ii, 950. Wood, Robert Williams, and J. Franck, the transformation of the resonance spectrum of fluorescing iodine into a banded spectrum by addition of

helium, A., ii, 170.
Wood, Robert Williams. See also J. Franck and Heinrich Rubens.

Woodhead, Arthur = Edmund. See Arthur George Green.

Woodhead, German Sims, the sterilisation of chalk waters by the use of minute quantities of bleaching powder, A., ii, 63.

Woodhead, German Sims. See also R. RFasson.

Woodland, W. N. F., gas production in teleostean fishes, A., ii, 1113.

Woodward, Truman S. See Gregory Paul Baxter.

Wootton, William Ord. See William Holdsworth Hurtley.

Worley, Frederick Palliser, studies of the processes operative in solutions. Part XII. The apparent hydration values of the acid systems and of salts deduced from a study of the hydro-

lytic activities of acids, T., 349. Woudstra, Herman Wijbe, degree of dispersity and viscosity, A., ii, 190. Woy, Rudolf, "Bad Reinerz" in Silesia

and its new medicinal springs, A., ii,

Woytaček, Karl, new water decomposition apparatus with a dividing wall, A., ii, 877.

Wrangell, Margarita von. See Wilhelm Wislicenus.

Wreath, S. R., and Philip Bouvier Hawk, fasting studies. IV. (Studies on water-drinking. VII.) Allantoin and purine excretion of fasting dogs, A., ii, 1012.

Wren, (Miss) Gertrude Holland. Arthur William Crossley.
Wright, Fred Eugene. See Earnest

Stanley Shepherd.

Wright, J. R., the positive potential of aluminium as a function of the wavelength of the incident light, A., ii, 456.

Wright, Robert, a sublimation apparatus, A., ii, 384.

a simplified combustion calorimeter, A., ii, 1064.

Wright, Robert. See also Cecil Reginald Crymble and Alfred Walter Stewart. Wroblewski, Augustin, soluble ferments of the brain, A., ii, 627.

Wünsch, Donald Frederick Sandys. See Frederick Daniel Chattaway.

Würth. See Karl Bernhard Lehmann. Wuite, J. P., pressure-temperature sections, A., ii, 1064.

Wulf. Theodor, radioactivity as a general property of matter, A., ii, 709.

Wulff, Georg, the so-called nucleus and convergence points of the "crystalline-liquid phase" of p-azoxyphenetole, A., ii, 593.

Wunder, Max, and (Mlle.) Nina Chéladzé, separation of aluminium and glucinum, A., ii, 773.

Wunder, Max, and B. Jeanneret, action of syrupy phosphoric acid on alloys prepared by the electric furnace, A., ii, 719.

Wunder, Max. See also Louis Duparc and Tcharviani.

Wurl, Erich. See August Michaelis.

Wurm, Erich. See Emil Abderhalden. Wuth, Berthold, indigo-yellow, A., i,

681. Wuyts, L., volumetric estimation of phosphoric acid soluble in 2% citric acid solution, A., ii, 656.

Y.

Yagi, S., a saponin-cholesterol compound, A., i, 140.

Yamasaki, Eüchi, the rate of dissolution of metallic copper in aqueous ammonia, A., ii, 383.

See Fritz Foerster. Yamasaki, J. Yates, A. G. See J. M. Beattie.

Yoder, Peter A., polarimetric method for the estimation of malic acid and its application to cane and maple products (sugars), A., ii, 1141. Yoshimoto, S. See Theodor Brugsch.

Yoshimura, Kiyohisa, the composition of malt-embryos, A., ii, 325. composition of bananas, A., ii, 526.

Young, Stewart Woodford, mechanical stimulus to crystallisation in supercooled liquids, A., ii, 261.

Young, Stewart Woodford, and R. J.

Cross, the mechanical stimulus to crys-

tallisation. II., A., ii, 865.
Young, William John, the composition of the hexosephosphoric acid formed by yeast-juice. II., A., i, 422. Young, William John. See also Arthur

Harden.

Z.

Zaar, B. See Friedrich WilhelmSemmler.

Zach, Karl. See Emil Fischer.

Zakrzewski, C. See Alois F. Kovarik. Zaleski, W., the respiration enzymes of plants, A., ii, 323.

rôle of nucleo-proteins in plants, A., ii, 819.

Zaleski, W., and A. Reinhard, the fermentative oxidation of oxalic acid, A., ii, 760.

the respiration of plants, A., ii, 1021. Zaleski, W., and Anna Rosenberg, the function of the plant catalases, A., ii,

Zalewski, J. See W. Sobolewa.

Zambonini, Ferruccio, muthmannite, a new mineral, A., ii, 734.

application of the content of uranium and lead of some minerals to the determination of the ages of the rocks containing them, A., ii, 959.

Zanda, Giovanni Battista, influence of caffeine on the ureopoetic system of the liver, A., ii, 1017.

Zavadovsky, A. See Nicolai M. Kijner. Zawadzki, J. See Fritz Haber.

Zawidzki, Jan von, and A. Schagger, the heat of solution of fused mixtures of potassium and sodium nitrate, A., ii. 257.

Zdobnický, Wenzel. See Julius Stoklasa. Zeidler, Karl. See Josef Herzig.

Zeisel, S., formation of cork, A., i, 768. Zeitschel, Otto. See A. Blumann.

Zelinsky, Nicolai D., dehydrogenation by catalysis, A., i, 958.

selective catalysis: a new tetrahydrobenzene [cyclohexane], A., i, 958. catalytic conversion of 1-methylcyclopentane-3-one into methylcyclo-

pentane, A., i, 988. catalytic reduction in a vacuum, A., i,

988.

catalytic isomerisation of a-pinene, A., i, 997.

Zelinsky, $Nicolai\ D.$, A. Annenkoff, and J.Kulikoff, preparation of the free esters

of amino-acids, A., i, 773.

Zelinsky, Nicolai D., and Nikolaus
Glinka, simultaneous reduction and

oxidation by catalysis, A., i, 870. Zelinsky, Nicolai D., and Alexander Gorsky, $\Delta^{1,3}$ -dihydrobenzene $[\Delta^{1,3}$ cyclohexadiene], A., i, 847. Zelinsky, Nicolai D., and N. A. Rosanoff,

ultra-violet absorption spectra of nitro-

compounds, A., ii, 1044. Zelinsky, Nicolai D., and G. Stadnikoff, 1 - aminocyclopentane - 1 - carboxylic acid, A., i, 974.

Zellner, Julius, chemistry of fly agaric (Amanita muscaria). IV., A., ii, 425.

Zemplén, Géza. See Emil Abderhalden. Zerewitinoff, Th., estimation of active hydrogen in organic compounds by means of magnesium methyl iodide, A., i, 101.

Zerewitinoff, Th., estimation of moisture in various substances by means of magnesium methyl iodide, A., ii, 1026.

Zerewitinoff, Th., and Iwan Ostromisslensky, barium oxide as a reducing agent; reduction of nitrobenzene to nitroso- and azo-benzene, aniline, phenazine, and ammonia, A., i, 849.

Zerner, Ernst, ethyl derivatives of acetone, A., i, 523.

ethylation of acetone, A., i, 950.

Zeynek, Richard von, pyridine compound of hæmochromogen, A., i, 95.

chemical investigation of atheromatous Composition of deposits in calcified aortæ, A., ii, 219.

Zies, Emanuel George. See Harmon Northrop Morse.

Zimmerli, Adolf. See Martin Onslow Forster.

Zimmermann, R. See Max Siegfried. Zincke, [Ernst Carl] Theodor, new series of aromatic sulphur compounds, A., i, 368.

Zincke, Theodor, and W. Breitweiser, action of nitric acid on halogen derivatives of o-alkylated phenols. II., A., i, 215.

Zincke, Theodor, and R. Brune, sulphur derivatives of o-cresol, A., i, 197.

Zincke, Theodor, W. Frohneberg, and J. Kempf, action of bromine and chlorine on phenols; substitution products; ψ -bromides and ψ -chlorides. XXV. A ψ -bromide from p-cresol containing sulphur and its transforma-

zincke, Theodor, and P. Jörg, p-amino-thiophenol [p-aminophenylmercap-tan], A., i, 39, 285.

Zincke, Theodor, and J. Kempf, sulphur derivatives of p-cresol, A., 1, 287.
 Zotier, V., volumetric estimation of phenolphthalein, A., ii, 163.

Zsigmondy, Richard, the structure of the gel of silicic acid; the theory of dehydration, A., ii, 880.

Zsigmondy, Richard, and R. Heyer, a new dialysor, A., ii, 260.

Zsuffa, Milan. See Carl Liebermann. Zumbusch. Emilie.See Ludwig Vanino.

Zuntz, Nathan. See I. Markoff. Zunz, Edgard, the proteoses, A., i, 1050.